

JVC[®]

SERVICE MANUAL

DV CAMCORDER

GY-DV5000U(A)/GY-DV5000E(A) GY-DV5001E(A)/GY-DV5001EC(A)



The photo shows the GY-DV5000 DV camcorder with an optional lens, viewfinder, microphone and mic holder.

DV Mini **DV**
PROFESSIONAL DV

Due to a software update the model name on the serial number plate of the GY-DV5000 has been changed to GY-DV5000(A) for units after the serial number listed below. This service manual only describes the matters that are difference from the GY-DV5000. On servicing, refer to the service manual of GY-DV5000 (No. 60148) together with this manual. The differences are as described in Section 1. *V30401*

GY-DV5000U(A) : Production for September 2003 and after
GY-DV5000E(A) : Production for September 2003 and after
GY-DV5001E(A) : Production for September 2003 and after
GY-DV5001EC(A) : Production for September 2003 and after

* A part of this service manual is described by English and Japanese.

1. SECTION 1 SERVICE CAUTIONS

1.1 Difference between GY-DV5000(A) and GY-DV5000

(1) Software for each CPU

Board	Symbol	GY-DV5000(A)	Latest version for GY-DV5000	Remarks
DBCP	IC801	PLSC1440-V5-01 PLSC1455-V5-01	PLSC1440-V1-09 PLSC1455-V1-09	SYS (GY-DV5000U/E) SYS (GY-DV5001E/EC)
DBCP	IC701	PLSC1441-V5-00	PLSC1441-V2-01	CAM
DV/CPU	IC302	PLSC1143-V5-00	PLSC1143-V2-06	MSD
DBCP	IC402	PLSC1442-V1-01 PLSC1443-V1-01	PLSC1442-V1-00 PLSC1443-V1-00	FPGA (GY-DV5000U) FPGA (GY-DV5000E/5001E/EC)

Note : In GY-DV5000(A), firmware of all the microcomputers and firmware of FPGA have been upgraded. As the version of the microcomputer firmware shows, the upgraded firmware is not compatible with the previous firmware. When you want to upgrade firmware of microcomputers for the purpose of service work, maintenance, or other purposes, upgrade all the firmware of all the microcomputers and firmware of FPGA.

To upgrade firmware of SYS/CAM/MSD microcomputers, use NetImpress made in YDC Corporation. To upgrade firmware of FPGA, use a special cable and upgrading software made in XILINX Corporation. For details, see the homepage of Professional Products Systems & Network Sector in JS-NET.

(2) PACKING

Page	Ref. No.	GY-DV5000(A)	GY-DV5000	Remarks
7-1		LWT0138	None	Additional Instruction Sheet

(3) OVERALL WIRING

Page	Ref. No.	GY-DV5000(A)	GY-DV5000	Remarks
4-4	—	WJN0122-001A	None	See next page.

Note : This wire assembly (WJN0122-001A) is used only for redirecting the output of IEEE1394 (DV signal) from the "DV IN/OUT" terminal to an extension terminal on the rear panel.

At the time of shipment, this wire assembly is not used. Therefore, one side (DV UNIT side) is not connected to anywhere.

If the following change is made when this model is connected to special application such as DR-DV5000 of FOCUS Enhancements, Inc., DV signal can be directly sent to and received from DR-DV5000.

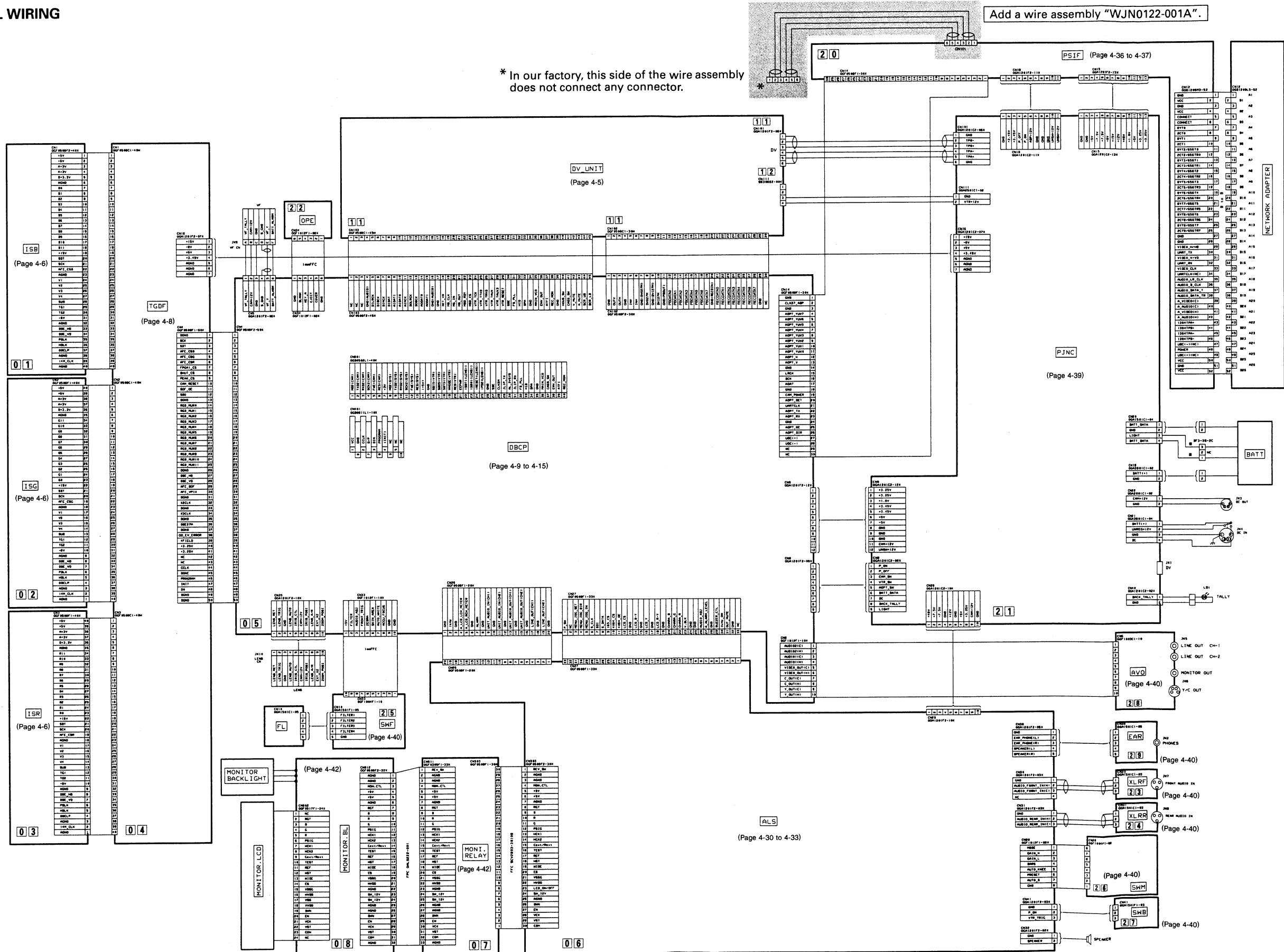
In this case, remove the existing wire from the CN101 on the DV unit, and connect this wire assembly to the CN101.

This change redirects the output of IEEE1394 (DV signal) to an extension terminal on the rear panel.

Caution : However, this change (remodeling) makes it impossible that a usual "DV IN/OUT" terminal sends and receives DV signal.

SECTION 4
EXPLODED VIEWS AND PARTS LIST

4.2 OVERALL WIRING



VTRモード時の補足説明

- 本機では、VTRモード時に下記の操作がおこなえます。
 - MODEスイッチを上方に押して、VTRインジケータを点灯させます。

バリアブルスロー再生

- 停止、再生またはスチル時、EDIT SEARCH + ボタンを押すと、スロー再生します。
EDIT SEARCH - ボタンを押すと、巻き戻しスロー再生します。

バリアブルスロースピード

- EDIT SEARCH + ボタンを押すごとにFWD方向に速くなります。
× 0.1 (SLOW+1) → × 0.2 (SLOW+2) → × 0.5 (SLOW+3) → × 1 (FWD) → × 0.1 (SLOW+1) ..
 - EDIT SEARCH - ボタンを押すごとにREV方向に速くなります。
× -0.1 (SLOW-1) → × -0.2 (SLOW-2) → × -0.5 (SLOW-3) → × -1 (REV) → × -0.1 (SLOW-1) ..
- ※ ステータス画面には、() 内の文字を表示します。

- 通常再生モードにもどすときは、PLAY ボタンを押します。
- 停止するときは、STOP ボタンを押します。
- スロー再生時のコマ送り量は、80 ページ STEP SLOW MODE 項目によって選択することができます。

タイムコード表示について

- EJECT または停止時、STOP ボタンを1秒間長押しすると、DV端子からの入力タイムコードデータまたはユーザースビットデータをステータス画面に表示します。
DTCG: DV端子からのタイムコードデータ
DUBG: DV端子からのユーザースビットデータ
元のタイムコードおよびユーザースビット表示にもどすときは、STOP ボタンを押します。
(VTRを動作させた場合も通常タイムコードまたはユーザースビット表示になります。)
※ タイムコードおよびユーザースビットの表示設定方法は、添付の取扱説明書 64 ページをお読みください。
※ DV端子からの入力タイムコードおよびユーザースビットは、記録されません。本機のタイムコードジェネレーターで発生するデータを記録します。
※ DV端子からの入力信号を記録する場合、タイムコードの連続性を保つためTC GENE. スイッチをREGENモードにしてご使用ください。

メモ

上記機能は、レーティングラベルのモデル名の後に(A)と表示されているモデルのみ操作できます。

Supplementary Explanation of the VTR Mode

- This unit allows the following operations in the VTR mode.
 - The VTR indicator lights when the MODE switch is pushed upward.

Variable Slow Playback

- During stop, playback or still playback, slow motion playback is effected by pressing the EDIT SEARCH + button. Pressing the EDIT SEARCH - button effects reverse slow motion playback.

Variable Slow Playback

- Playback in FWD direction becomes faster each time the EDIT SEARCH + button is pressed.
× 0.1 (SLOW+1) → × 0.2 (SLOW+2) → × 0.5 (SLOW+3) → × 1 (FWD) → × 0.1 (SLOW+1) ..
 - Playback in REV direction becomes faster each time the EDIT SEARCH - button is pressed.
× -0.1 (SLOW-1) → × -0.2 (SLOW-2) → × -0.5 (SLOW-3) → × -1 (REV) → × -0.1 (SLOW-1) ..
- * The characters indicated in parentheses () are shown on the Status screen.

- To return to the normal playback mode, press the PLAY button.
- To stop, press the STOP button.
- The amount of frames advanced in slow motion playback can be set in STEP SLOW MODE on page 80.

Indication of the Time Code

- Pressing the STOP button for 1 second in the EJECT or stop mode displays the time code data or user's bit data input from the DV terminal on the Status screen.
DTCG: The time code data from the DV terminal
DUBG: The user's bit data from the DV terminal
To return to display of the original time code or user's bit, press the STOP button.
(Display of the normal time code or user's bit is also restored by performing VTR operation.)
* For display setting method for the time code or user's bit, see the supplied instruction manual 64 page.
* The time code and user's bit input from the DV terminal are not recorded. The data generated by the camera's time code generator is recorded.
* To maintain the continuity of time code data, use with the TC GENE. switch set to REGEN mode when recording input signal from the DV terminal.
This does not apply to GY-DV5000E.

MEMO

The functions described above can only be operated in the case of a model whose model name is followed by the (A) indication on the rating label.

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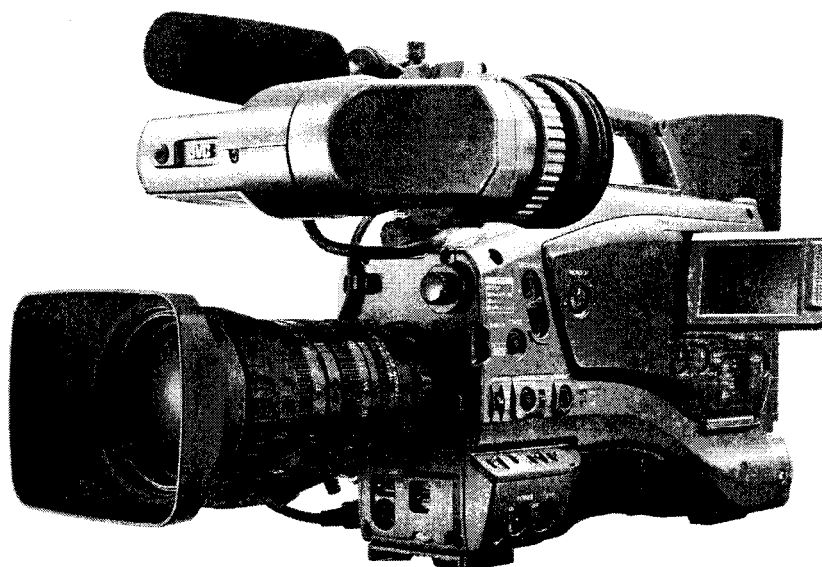
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VIDE-V30401

SERVICE MANUAL

DV CAMCORDER

GY-DV5000U/GY-DV5000E



The photo shows the GY-DV500 DV camcorder with an optional lens, viewfinder, microphone and mic holder.

DV Mini **DV**
PROFESSIONAL DV

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Important Safety Precautions

Prior to shipment from the factory, JVC products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

●Precautions during Servicing

1. Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product. When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

2. Parts identified by the $\triangle$ symbol and shaded (■) parts are critical for safety.
Replace only with specified part numbers.
Note: Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

3. Fuse replacement caution notice.
Caution for continued protection against fire hazard.
Replace only with same type and rated fuse(s) as specified.

4. Use specified internal wiring. Note especially:
1) Wires covered with PVC tubing
2) Double insulated wires
3) High voltage leads

5. Use specified insulating materials for hazardous live parts. Note especially:
1) Insulation Tape 3) Spacers 5) Barrier
2) PVC tubing 4) Insulation sheets for transistors

6. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering.

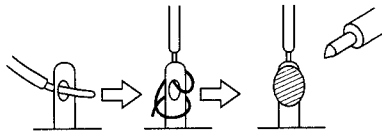


Fig.1

7. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

8. Check that replaced wires do not contact sharp edged or pointed parts.

9. When a power cord has been replaced, check that 10-15 kg of force in any direction will not loosen it.

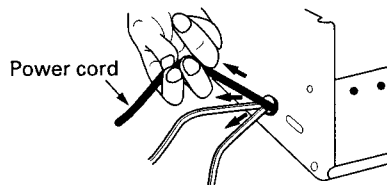


Fig.2

10. Also check areas surrounding repaired locations.

11. Products using cathode ray tubes (CRTs)
In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the specified parts. Under no circumstances attempt to modify these circuits. Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

12. Crimp type wire connector

In such cases as when replacing the power transformer in sets where the connections between the power cord and power transformer primary lead wires are performed using crimp type connectors, if replacing the connectors is unavoidable, in order to prevent safety hazards, perform carefully and precisely according to the following steps.

1) **Connector part number** : E03830-001

2) **Required tool** : Connector crimping tool of the proper type which will not damage insulated parts.

3) **Replacement procedure**

(1) Remove the old connector by cutting the wires at a point close to the connector.

Important : Do not reuse a connector (discard it).

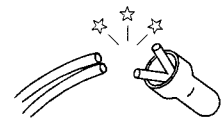


Fig.3

(2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

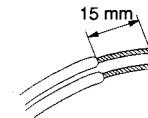


Fig.4

(3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

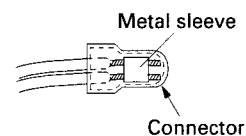


Fig.5

(4) As shown in Fig.6, use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

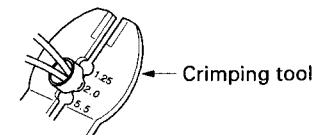


Fig.6

(5) Check the four points noted in Fig.7.

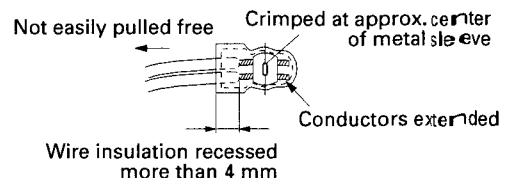


Fig.7

● Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

1. Insulation resistance test

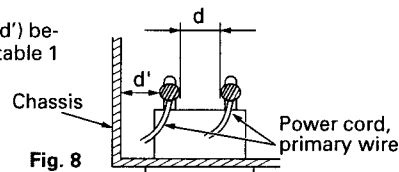
Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

2. Dielectric strength test

Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

3. Clearance distance

When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See table 1 below.

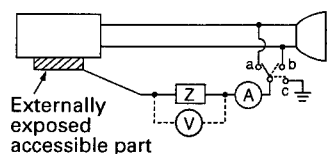


4. Leakage current test

Confirm specified or lower leakage current between earth ground/power cord plug prongs and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).

Measuring Method : (Power ON)

Insert load Z between earth ground/power cord plug prongs and externally exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See figure 9 and following table 2.

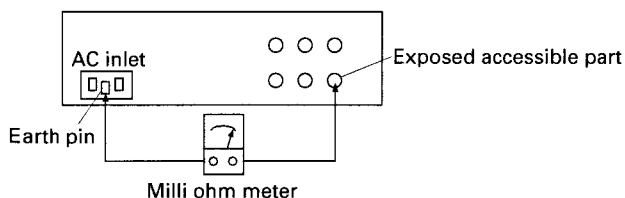


5. Grounding (Class I model only)

Confirm specified or lower grounding impedance between earth pin in AC inlet and externally exposed accessible parts (Video in, Video out, Audio in, Audio out or Fixing screw etc.).

Measuring Method:

Connect milli ohm meter between earth pin in AC inlet and exposed accessible parts. See figure 10 and grounding specifications.



Grounding Specifications

Region	Grounding Impedance (Z)
USA & Canada	$Z \leq 0.1 \text{ ohm}$
Europe & Australia	$Z \leq 0.5 \text{ ohm}$

AC Line Voltage	Region	Insulation Resistance (R)	Dielectric Strength	Clearance Distance (d), (d')
100 V	Japan	$R \geq 1 \text{ M}\Omega/500 \text{ V DC}$	AC 1 kV 1 minute	$d, d' \geq 3 \text{ mm}$
100 to 240 V			AC 1.5 kV 1 minute	$d, d' \geq 4 \text{ mm}$
110 to 130 V	USA & Canada	—	AC 900 V 1 minute	$d, d' \geq 3.2 \text{ mm}$
110 to 130 V	Europe & Australia	$R \geq 10 \text{ M}\Omega/500 \text{ V DC}$	AC 3 kV 1 minute (Class II)	$d \geq 4 \text{ mm}$
200 to 240 V			AC 1.5 kV 1 minute (Class I)	$d' \geq 8 \text{ mm (Power cord)}$ $d' \geq 6 \text{ mm (Primary wire)}$

Table 1 Specifications for each region

AC Line Voltage	Region	Load Z	Leakage Current (i)	a, b, c
100 V	Japan	$1 \text{ k}\Omega$	$i \leq 1 \text{ mA rms}$	Exposed accessible parts
110 to 130 V	USA & Canada	$0.15 \mu\text{F}$ and $1.5 \text{ k}\Omega$	$i \leq 0.5 \text{ mA rms}$	Exposed accessible parts
110 to 130 V	Europe & Australia	$2 \text{ k}\Omega$	$i \leq 0.7 \text{ mA peak}$ $i \leq 2 \text{ mA dc}$	Antenna earth terminals
220 to 240 V		$50 \text{ k}\Omega$	$i \leq 0.7 \text{ mA peak}$ $i \leq 2 \text{ mA dc}$	Other terminals

Table 2 Leakage current specifications for each region

Note: These tables are unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

SECTION 1

SERVICE CAUTIONS AND DISASSEMBLY

1.1 RESETTING THE POWER CIRCUIT PROTECTION BREAKER

This unit employs a power circuit protection breaker in place of a fuse to disconnect from the main power and to thus protect the internal circuitry from damage caused by any current overload. The power can be re-connected by resetting the breaker.

To prevent any complications resulting from the failure, check the cause of the shutdown and repair it before resetting the circuit breaker.

- (1) Switch OFF the POWER of this unit as well as that of any equipment supplying power to it.
- (2) The circuit breaker (A) is located below the VCR at the rear. Press the BREAK button to re-connect the power line.

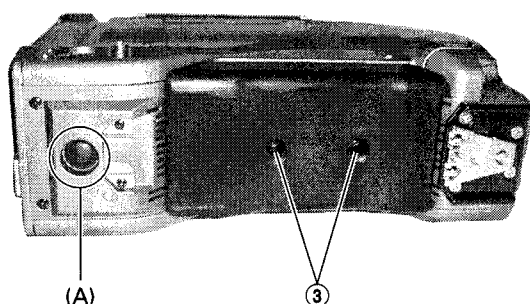


Fig. 1-1 Breaker arrangement

1.2 REMOVING THE EXTERIOR COVERS

1.2.1 Removing the left side cover

- (1) Open the cassette cover by pressing the EJECT switch.
- (2) Loosen the 4 screws (1) and remove the left side cover.

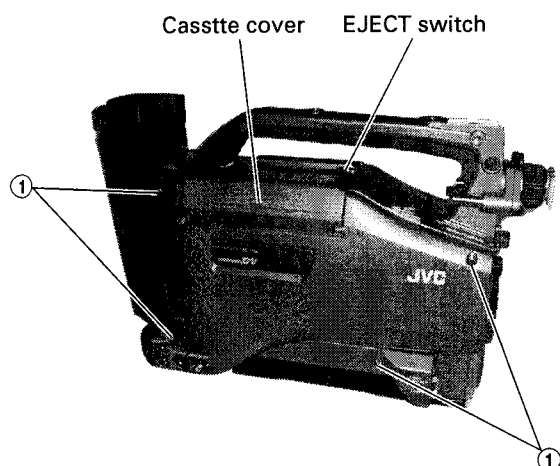


Fig. 1-2-1 Removing the left side cover

1.2.2 Opening the Right side cover

- (1) Loosen the 4 screws (2).

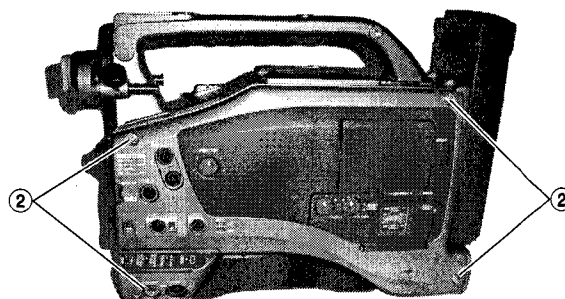


Fig. 1-2-2(1) Opening the Right side cover

- (2) Flip open the right side cover toward the front.

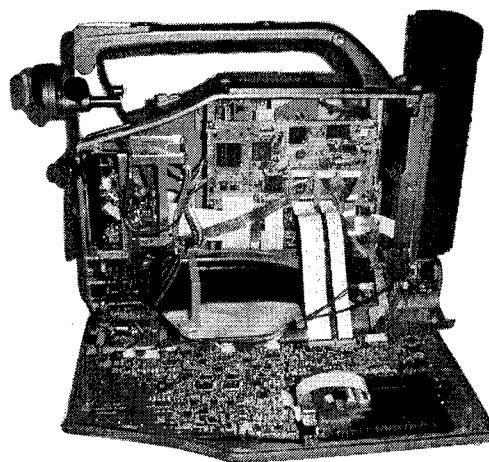


Fig. 1-2-2(2) The state which opened the right side cover

1.2.3 Removing the bottom cover

- (1) Remove the left side cover (see section 1.2.1).
- (2) Removing the 2 screws (3) and remove the shoulder pads (see Fig.1-1).
- (3) Remove the 4 screws (4) and remove the bottom cover.

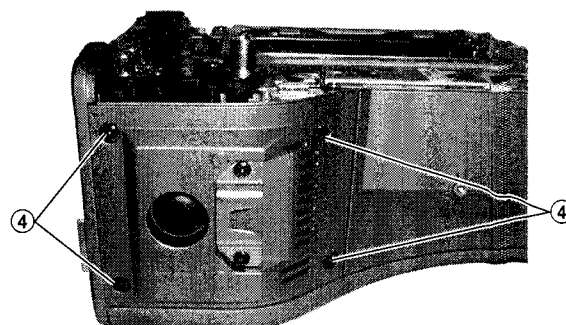


Fig 1-2-3 Removing the bottom cover

1.3 LAYOUTS THE MAJOR BOARDS

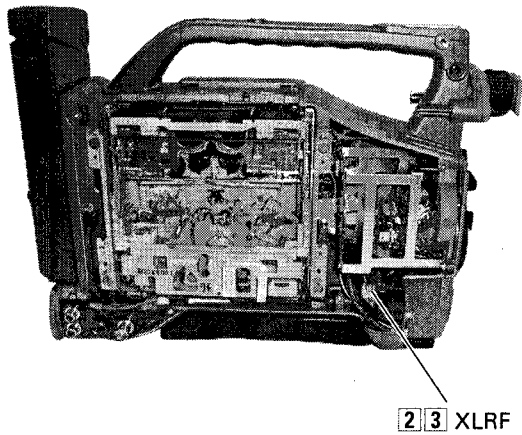


Fig. 1-3-1

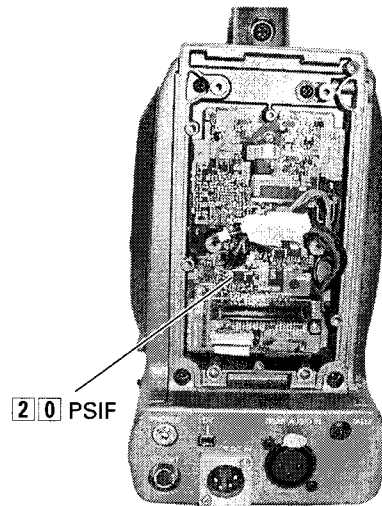


Fig. 1-3-2

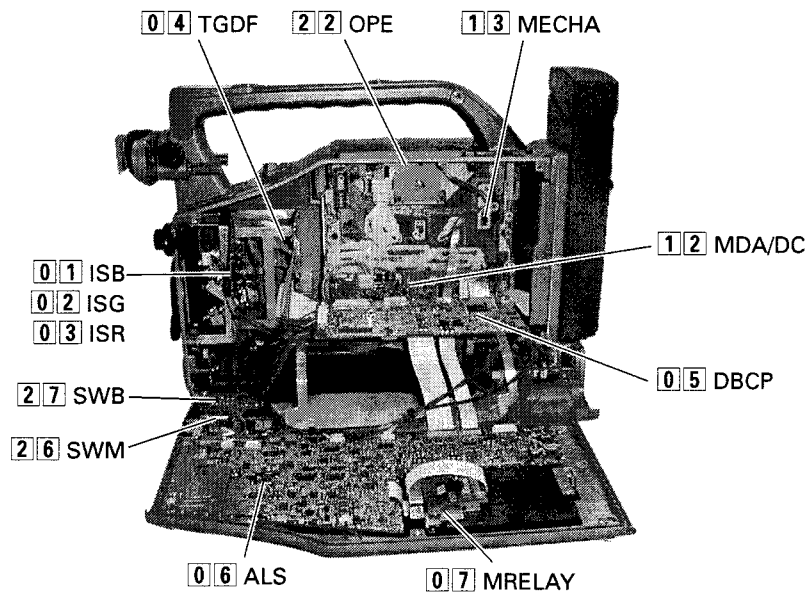


Fig. 1-3-3

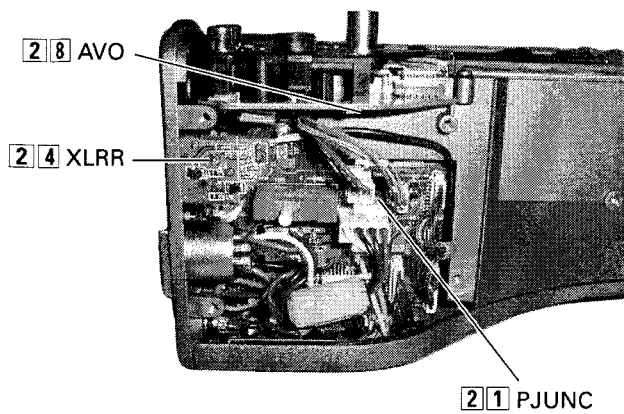


Fig. 1-3-4

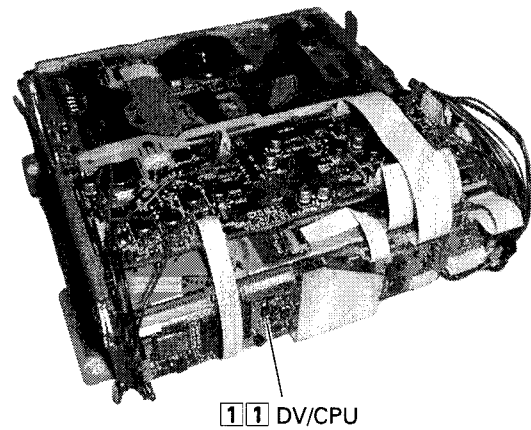


Fig. 1-3-5

1.4 REMOVING THE OPTICAL BLOCK ASSEMBLY AND THE OPTICAL FILTER ASSEMBLY

- (1) Remove the right side cover (see section 1.2.2).
- (2) Remove the 4 screws ①.

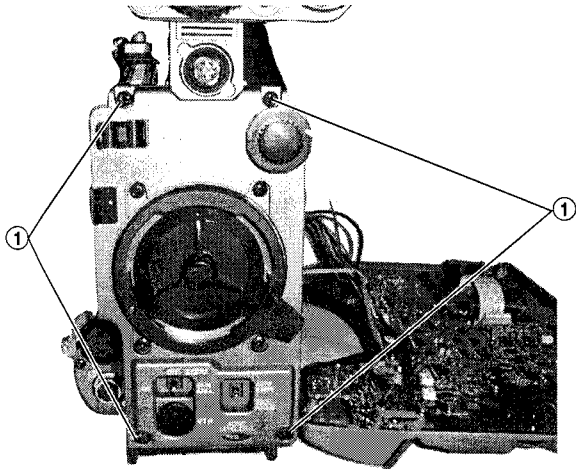


Fig. 1-4-1

- (3) Remove the wire assembly from the connector CN4, CN33 and CN35, and pull the optical block assembly and front panel together with the front.

CAUTION

Be careful not to damage the boards or FFC cables.

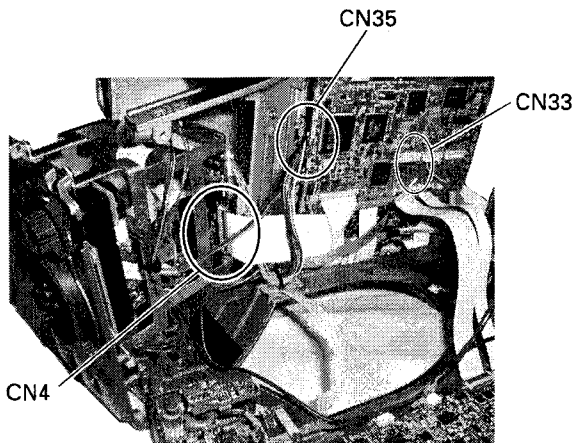


Fig. 1-4-2

- (4) Remove the 4 screws ②, then remove the TGDF board and mounting bracket.

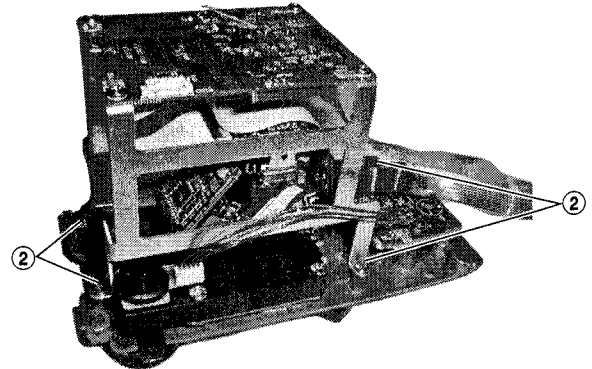


Fig. 1-4-3

- (5) Flip open CN1, CN2 and CN3 and unplug the FFC cable.

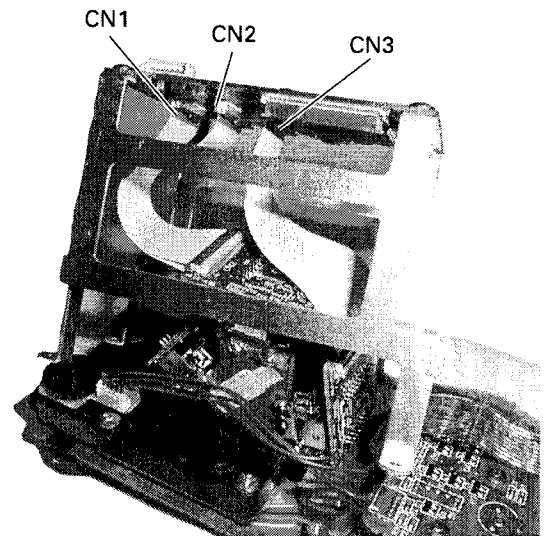


Fig. 1-4-4

- (6) Loosen the 2 screws ③ and remove the connector (B), then remove the optical filter assembly in the direction of the arrow.

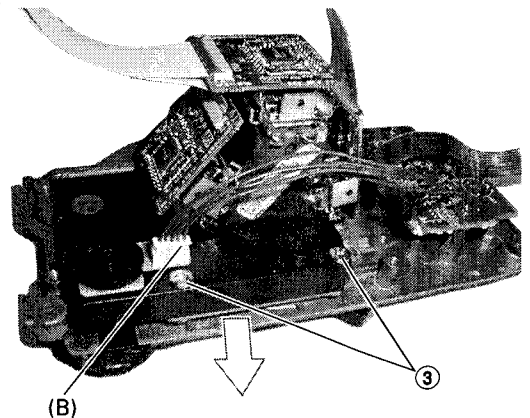
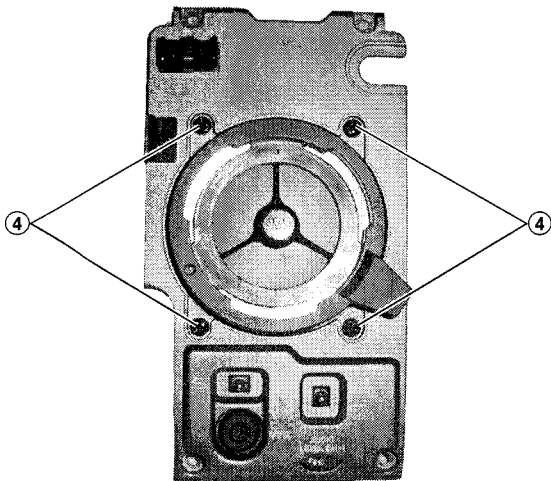


Fig. 1-4-5

- (7) Removing the 4 screws ④ and separate the optical block assembly from the front panel.



Note :

- The CCDs are bonded precisely to the prism. In case of trouble with a CCD, it is not possible to replace an individual CCD, but the entire optical block assembly should be replaced.
- The optical block assembly supplied as a service part (SCM1210-N0A (NTSC), SCM1210-P0A (PAL)) is not equipped with the TGDF board. When replacing the optical block assembly, attach the surrounding PC boards to the new assembly before mounting in the camera.

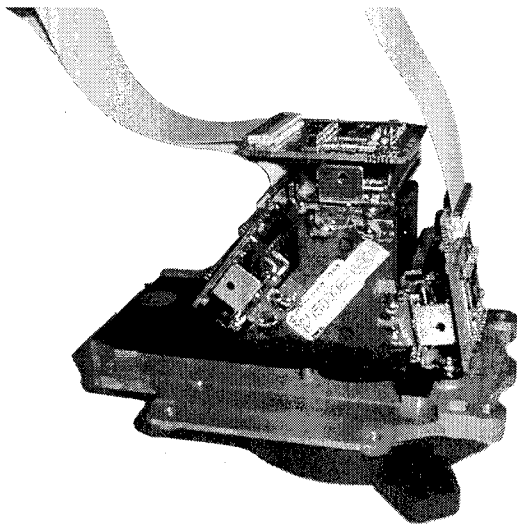


Fig. 1-4-7

CAUTION

When mounting the optical block assembly in the camera, take care of the positioning of the wire assembly. A malfunction may occur if a wire is somehow caught up.

1.5 REMOVING MAJOR BOARDS FROM THE CAMERA

1.5.1 Removing the TGDF board.

- (1) Remove the optical block assembly together with TGDF front panel. (see section 1.4)
- (2) Remove the 4 screws ①. Now the TGDF board can be removed.

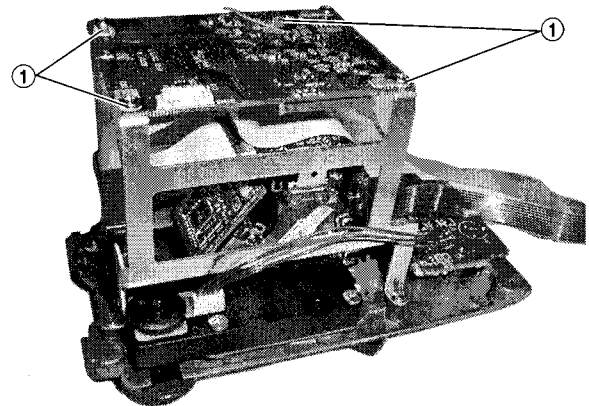


Fig.1-5-1(1)

- (3) Be careful and gently unplug the flexible cables connecting the IS board and the TGDF board at the TGDF board side.

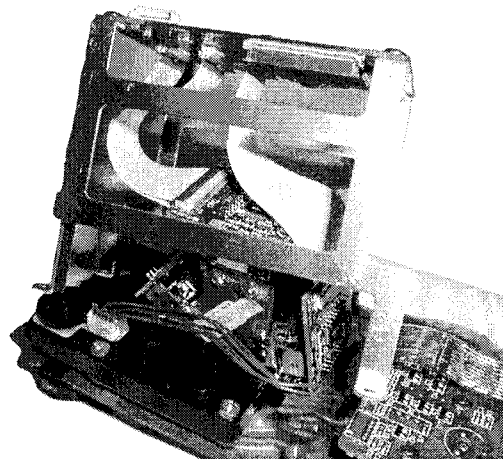


Fig. 1-5-1(2)

1.5.2 Removing the DBCP board

- (1) Open the right side cover (see section 1.2.2).
- (2) Remove the 2 screws ②. Now the DBCP board can be opened in the direction of arrow.

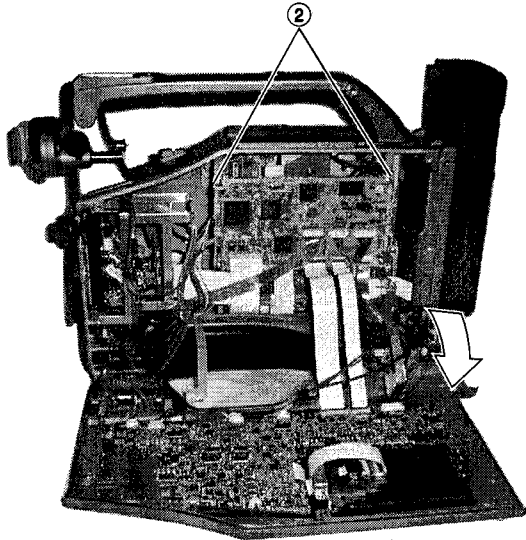


Fig. 1-5-2

1.5.3 Removing the ALS board

- (1) Open the right side cover (see section 1.2.2).
- (2) Remove the 9 screws ③. Now the ALS board can be removed.

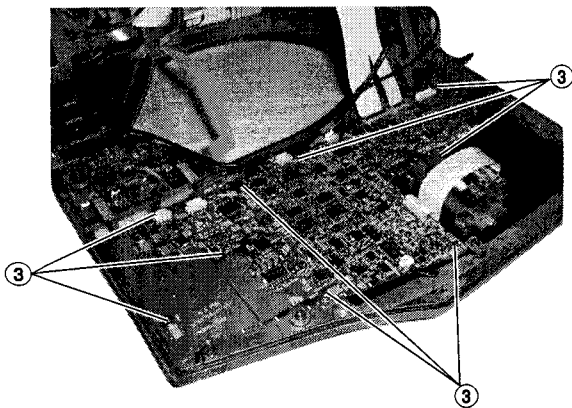


Fig. 1-5-3(1)

- (3) Be careful do not damage each wire assembly and FFC cables when removing ALS board.

1.6 REMOVING THE LCD MONITOR

- (1) Open the right side cover (see section 1.2.2). And remove the each wire assembly and FFC cable from ALS board side.
- (2) Remove the 1 screws ① at the front of right side cover. Then slide the cover plate toward the arrow side and remove it.
- (3) Remove the 2 screws ②.

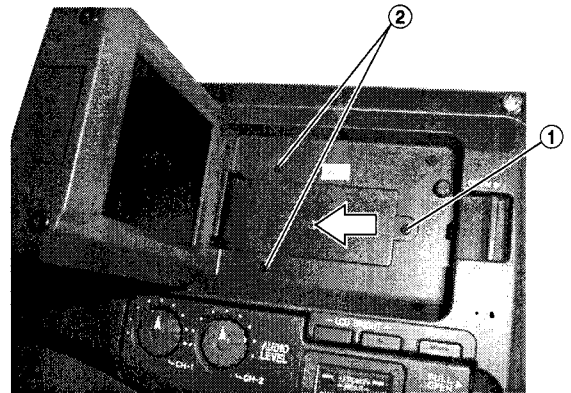


Fig. 1-6-1

- (4) Remove the 2 screws ③ fixed on bracket and 2 screws ④ fixed on M RELAY board.
- (5) Remove FFC cable from CN911 gently and remove M RELAY board.

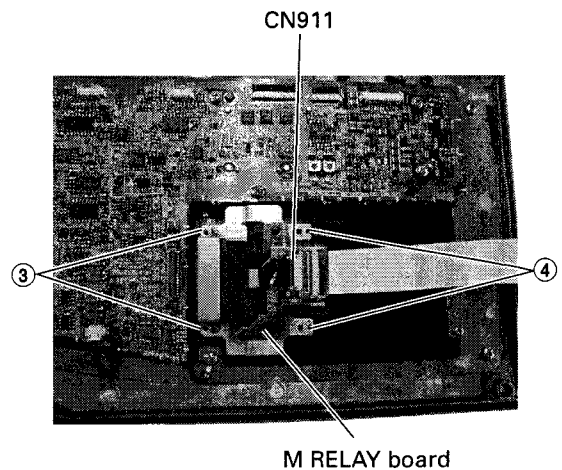


Fig.1-6-2

- (6) TURN the LCD monitor screen so that the face upward, and push it toward the inner side of the right side cover as shown in figure.
- (7) When the LCD monitor is shifted in the direction of the arrow while pushed, it is possible to remove by the LCD monitor's moving from the opening to the inside of the cover.

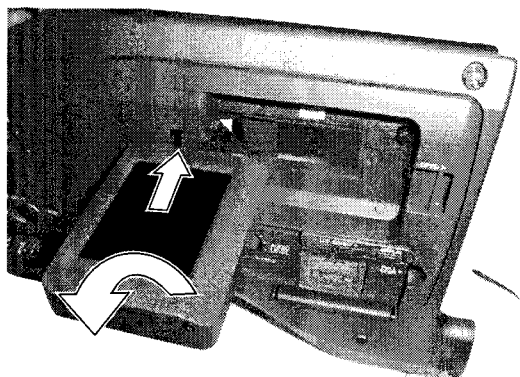


Fig.1-6-3

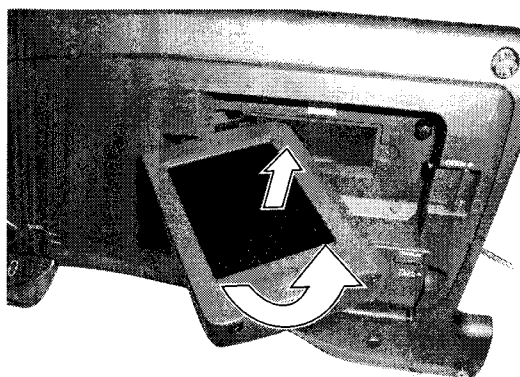


Fig.1-6-4

1.7 REMOVING THE VCR UNIT

- (1) Remove the left side cover (see section 1.2.1)
- (2) Remove the 4 screws ① fixed on VCR unit.

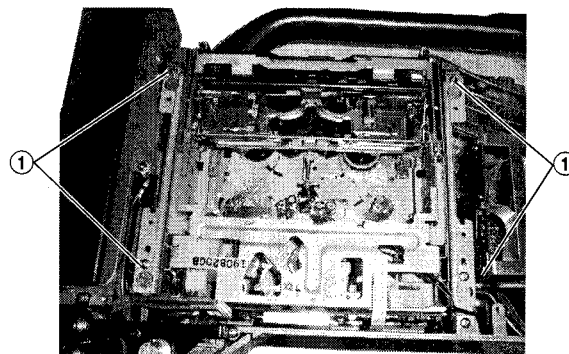


Fig.1-7-1

- (3) Lift up the VCR unit gently by upside first, and remove the wire from CN111 at the back side of VCR unit.

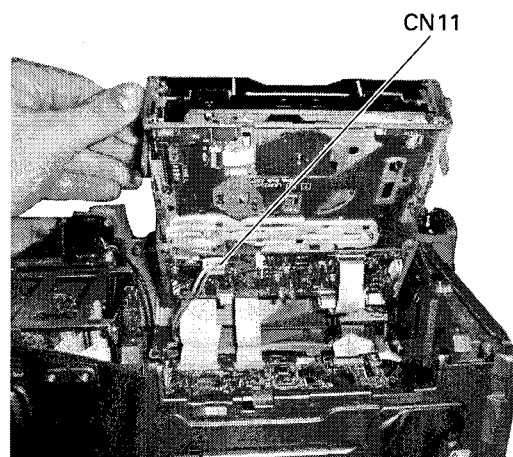


Fig.1-7-2

- (4) Remove wire assembly and FFC cable front the connector CN101, CN102 and CN103. Now the VCR unit can be removed.

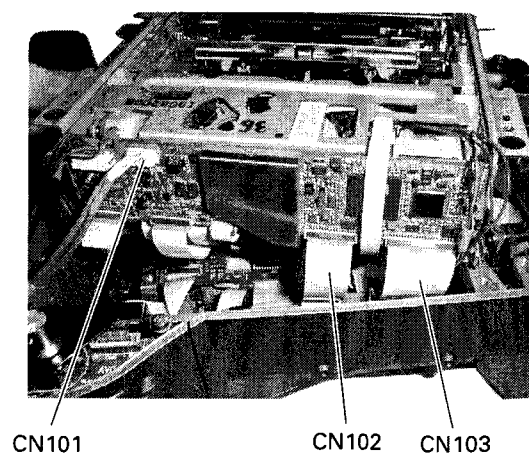


Fig. 1-7-3

- (5) If it will be required to repair or maintenance at the VCR unit which is removed, refer to the section 2.

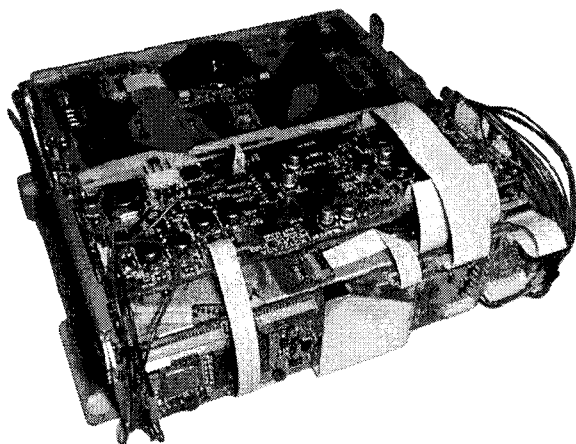


Fig.1-7-4

- (3) Remove the 3 screws ②. Now the IF board can be removed.

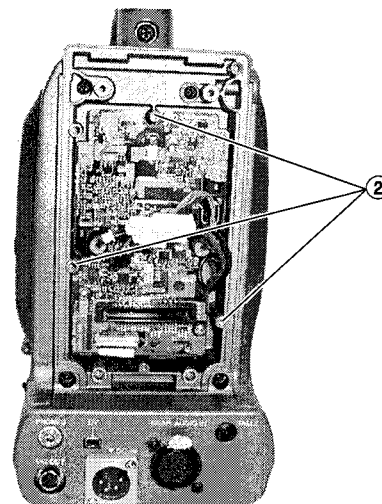


Fig.1-8-2

1.8 REMOVING THE BATTERY CASE AND IF BOARD ASSEMBLY

- (1) Remove the battery case according to the instruction book page xx.
- (2) Remove the 2 screw ①. Then remove the cover plate (black) and non fixed plate.

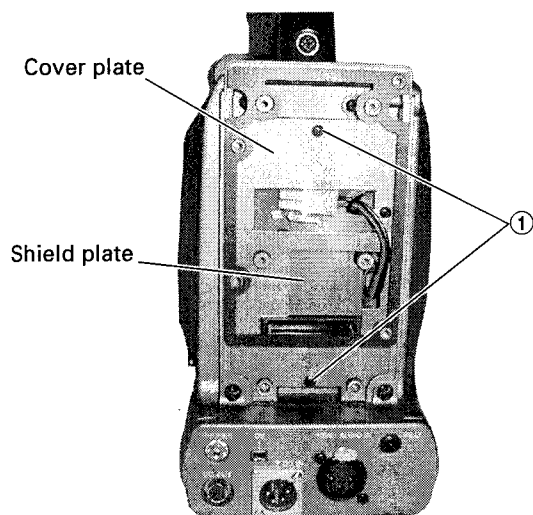


Fig.1-8-1

1.9 SERVICE MENUS

1.9.1 Modes required in servicing

- (1) While holding down the specified button(s) (FAS, LOLUX), press and hold the STATUS button for more than 1 second in order to display the first-level menu of the service menu hierarchy. The items in the first-level menu vary according to which specified button is being held at the moment the MENU button is pressed. (Characters are displayed on LCD monitor screen or View finder.)

Item	Displayed Content	When power up		
		—	Holding DISPLAY button	Holding DISPLAY button
		Activation Method		
		FAS	LOLUX	FAS+ LOLUX
CAMERA1 MENU	Camera setting, blemish detect	○	○	○
CAMERA2 MENU	Error correct ON/OFF	—	○	○
CAMERA3 MENU	AW data reset menu	—	—	○
VTR1 MENU	Repeat, FF/REW speed setting	○	○	○
VTR2 MENU	Long pause, shutdown setting	—	○	○
VTR3 MENU	Reserved	—	—	○
DIP SW	DIP SW MENU	—	○	○
HOURLY METER	Hour Meter indication	—	○	○
ERROR HISTORY	Warning History	—	○	○
OTHERS	MENU SAVE etc.	—	○	○
CPU VERSION	CPU Version indication	○	—	—

Table 1-9-1 Service Menu First Tier List

1.9.2 Operation in the first-level of the service menu

- (1) While holding down the specified button(s) (FAS, LOLUX), press and hold the MENU button for more than 1 second.
- (2) The first-level of the service menu is displayed.
- (3) Rotate the SHUTTER dial to move the cursor (▷) on to the item to be modified.
- (4) Push into the SHUTTER dial to direct the item on which the cursor (▷) is located.
 - Pressing the MENU button returns to the status display.
 - Can not open the service MENU while recording.

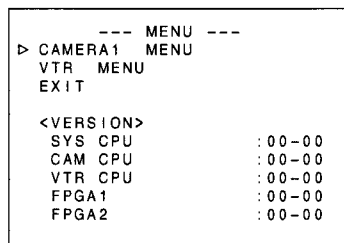


Fig. 1-9-1 (1)

While holding down the FAS button, press and hold STATUS button for more than 1 second, this MENU screen is showed on the monitor.

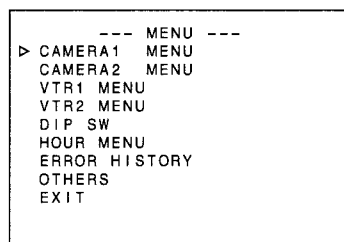


Fig. 1-9-1 (2)

At first, while holding down the DISPLAY button, turn ON the power switch, and then, While holding down the FAS button, press and hold STATUS button for more than 1 second, this MENU screen is showed on the monitor.

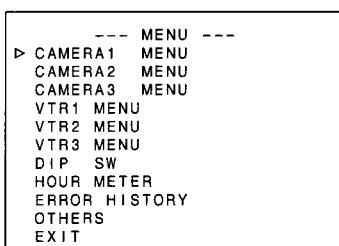


Fig. 1-9-1 (3)

At first, while holding down the DISPLAY button, turn ON the power switch, and then, While holding down the FAS and LOLUX button, press and hold STATUS button for more than 1 second, this MENU screen is showed on the monitor.

1.9.3 CAMERA 1 menu

- (1) In a service menu, place the cursor (▷) on "CAMERA 1" and push the SHUTTER dial to display the CAMERA1 menu.

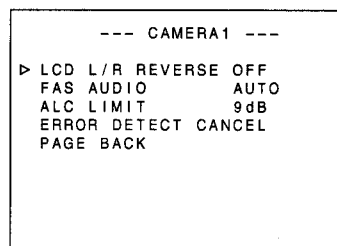


Fig. 1-9-2

- (2) Rotate the SHUTTER dial to move the cursor (▷) on the mode to be adjusted.
- (3) Push the SHUTTER dial so that the parameter blinks.
- (4) Rotate the SHUTTER dial to vary the parameter.
- (5) After completing the parameter setting, push the SHUTTER dial to stop the blinking of the parameter and store the setting in memory.
- (6) After completing the setting, move the cursor (▷) to "PAGE BACK" and push the SHUTTER dial to return to the display at the higher hierarchy level.

Item	Parameter	
LCD L/R REVERSE	OFF	When the face of LCD screen is turned toward the camera subject, does not invert the left and right of the LCD display. (normal image)
	ON	When the face of LCD screen is turned toward the camera subject, inverts the left and right of the LCD display. (mirror image)
FAS AUDIO	AUTO	When selected FAS mode, audio recording Level will be automatically set to AUTO mode.
	SW SET	When selected FAS mode, audio recording level will be work depending on switch setting.
ALC LIMIT	9dB	Maximum ALC value set to 9dB.
	12dB	Maximum ALC value set to 12dB.
	15dB	Maximum ALC value set to 15dB.
	18dB	Maximum ALC value set to 18dB.
ERROR DETECT CANCEL	CANCEL	Standard setting
	EXECUTE	Push the SHUTTER dial when indicate this message to start the CCD Blemish detect function.

() indicates the factory setting.)

Table 1-9-2

■ White blemish detection

Move the cursor at the item "ERROR DETECT CANCEL" and select "EXECUTE", then push the SHUTTER dial then CCD white blemish detect operation start automatically.

At this time, the lens is closed and the camera is in the LOLUX mode.

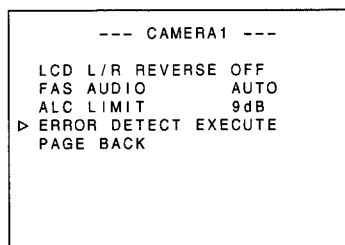


Fig. 1-9-3

When the white blemish detection completes, the result data is stored in the memory of CPU, end message is showed as below, then please turn off.

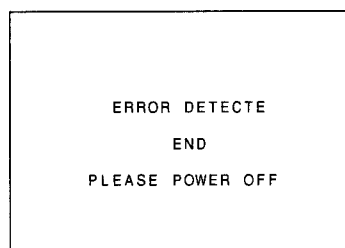


Fig. 1-9-4

If any errors occurs during the detection operation, an error message is displayed , and return to status display.

Message	Error details	Treatment
LENS NOT CLOSED?	The lens does not close for detection.	No result is stored in the EEPROM.
COUNT OVER	The number exceeds the specified count.	Only the specified count of data is stored in the EPROM.

Table 1-9-3

■ Details on correctable white blemish

Up to 32 errors with composite video levels of 50mV or more can be corrected. However, the maximum number of errors per line is limited to 16. (However, if two errors are adjacent to each other, the correction results are inferior to the case in which a single error due to principles of error collection occurs.)

Oblique noise may be observed on the screen during white blemish detection. This is due to the principles of error correction and is not a malfunction.

White blemish can be detected in the following area.

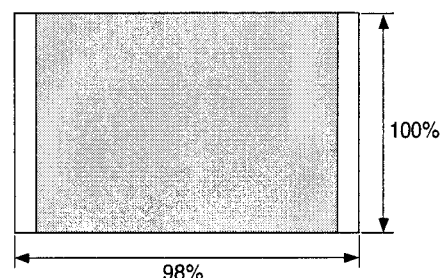


Fig 1-9-5

1.9.4 CAMERA 2 menu

- (1) In a service menu, place the cursor on "CAMERA 2" and push the SHUTTER dial to display the CAMERA2 menu.

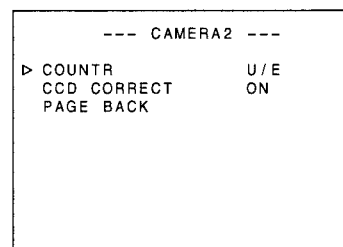


Fig. 1-9-6

Operation ways are almost same as CAMERA 1 MENU, so please refer it.

Item	Parameter	
COUNTRY *1	☐ U/E	Destination setting U: USA(NTSC), E: Europe(PAL)
	☐ I/EC	Destination setting I: Japan(NTSC), EC: Chine(PAL)
CCD CORRECT *2	☒ ON	Corrects the detected white blemish.
	☐ OFF	Does not correct the detected white blemish.

(☐ indicates the factory setting.)

Table 1-9-4

*1: NTSC/PAL is determined by the hardware.
(alternation of resistance constant)

*2: This mode is set to on at the moment the power is turned ON.

The OFF mode is enabled only after it is set to OFF at this screen until the power is turned OFF.

1.9.5 CAMERA 3 menu

In a service menu, place the cursor on "CAMERA 3" and push the SHUTTER dial to display the CAMERA3 menu.

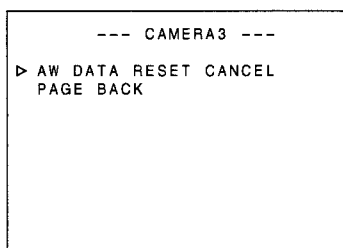


Fig. 1-9-7

Operation ways are almost same as CAMERA 1 MENU, so please refer it.

Item	Parameter
AW DATA RESET	☐ CANCEL Standard setting
	☐ EXECUTE Push the SHUTTER dial when indicate this message to reset the Auto White data.

(☐ indicates the factory setting.)

Table 1-9-5

1.9.6 VTR 1 menu

In a service menu, place the cursor on "VTR 1" and push the SHUTTER dial to display the VTR 1 menu.

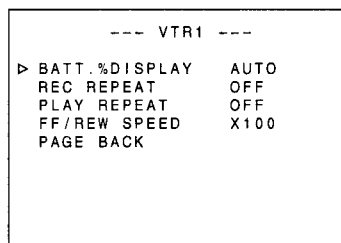


Fig. 1-9-8

Operation ways are almost same as CAMERA 1 MENU, so please refer it.

Item	Parameter
BATT % DISPLAY	OFF Show the Battery voltage. (Does not indicate "%" count of battery remaining.)
	☐ AUTO When install the Anton-Bar digital battery system, Show the battery remaining data for "%" information.
REC REPEAT	☐ OFF Disable repeat recording
	2 Perform repeat recording 2 times.
	12 Perform repeat recording 12 times.
	ON Enable full repeat recording.
PLAY REPEAT	☐ OFF Disable repeat playback.
	ON Enable repeat playback.
FF/REW SPEED	X50 Maximum FF/REW speed will be limited up to x50.
	X75 Maximum FF/REW speed will be limited up to x75.
	☒ X100 Maximum FF/REW speed will be limited up to x100.
	MAX No limitation

(☐ indicates the factory setting.)

Table 1-9-6

1.9.7 VTR 2 menu

In a service menu, place the cursor on "VTR 2" and push the SHUTTER dial to display the VTR 2 menu.

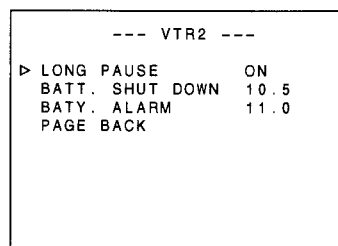


Fig. 1-9-9

Operation ways are almost same as CAMERA 1 MENU, so please refer it.

Item	Parameter
LONG PAUSE	OFF Disable the long pause function.
	☐ ON Enable the long pause function.
BATT. SHUT DOWN	xx.x Setting of the battery voltage at which shutdown should occur. (Setting in 0.1V steps between 10.5 V and 13.6V.)
BATT. ALARM	xx.x Setting of the battery voltage at which battery alarm is indicated. (Setting in 0.1 V steps between 10.5V and 13.6V.)

(☐ indicates the factory setting.)

Table 1-9-7

In case of the battery type which will be using, " BATT. SHUT DOWN" and "BATT. ALARM" setting should be set automatically shown as next table.

BATTERY TYPE	SHUT DOWN	ALARM
12V BATTERY	10.5V	11.5V
13.2 BATTERY	10.5V	12.5V
14.4V BATTERY	10.5V	13.5V

- When operating by DC input, then "SHUT DOWN" will be set to 10.5V, and "ALARM" will be set to 11.5V automatically, and these setting will not relate to menu setting.

1.9.8 VTR 3 menu

In a service menu, place the cursor on "VTR 3" and push the SHUTTER dial to display the VTR 3 menu.

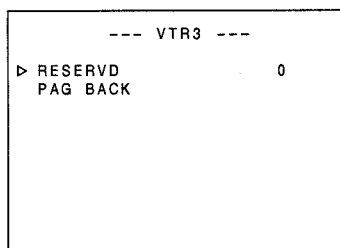


Fig. 1-9-10

Changing of setting is prohibited.

Item	Parameter
RESERVED	0 Normal setting

(indicates the factory setting.)

Table 1-9-8

1.9.9 DIP SW menu

(1) In a service menu, place the cursor on "DIP SW " and push the SHUTTER dial to display the DIP SW menu.

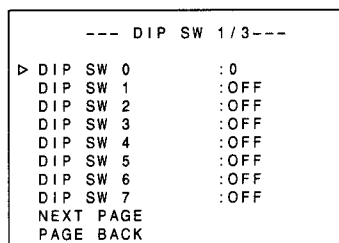


Fig.1-9-11 (1)

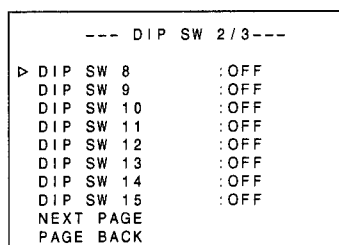


Fig. 1-9-11 (2)

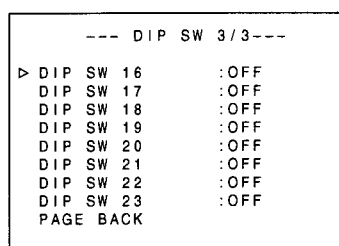


Fig. 1-9-11 (3)

Operation ways are almost same as CAMERA 1 menu, so please refer it

All DIP Switches setting which are shown below will not change from factory setting except repair or maintenance. And do not forget to return original position after repair.

Item	Parameter	Factory setting
--- DIP SW 1/3 ---		
DIP SW 0	1 : Displays error rate monitor and CPU port information	0
DIP SW 1	ON: Disable warning detection	OFF
DIP SW 2	Change prohibited	OFF
DIP SW 3	ON: Disable DEW warning	OFF
DIP SW 4	ON: Disable Cassette Cover warning	OFF
DIP SW 5	Change prohibited	OFF
DIP SW 6	Change prohibited	OFF
DIP SW 7	Change prohibited	OFF
--- DIP SW 2/3 ---		
DIP SW 8	Change prohibited	OFF
DIP SW 9	Change prohibited	OFF
DIP SW 10	ON: Displays error rate solely for audio block on the error rate monitor screen	OFF
DIP SW 11	Change prohibited	OFF
DIP SW 12	Change prohibited	OFF
DIP SW 13	Change prohibited	OFF
DIP SW 14	Change prohibited	OFF
DIP SW 15	Change prohibited	OFF
--- DIP SW 3/3 ---		
DIP SW 16	Change prohibited	OFF
DIP SW 17	Change prohibited	OFF
DIP SW 18	Change prohibited	OFF
DIP SW 19	Change prohibited	OFF
DIP SW 20	Change prohibited	OFF
DIP SW 21	Change prohibited	OFF
DIP SW 22	Change prohibited	OFF
DIP SW 23	Change prohibited	OFF

Table 1-9-9

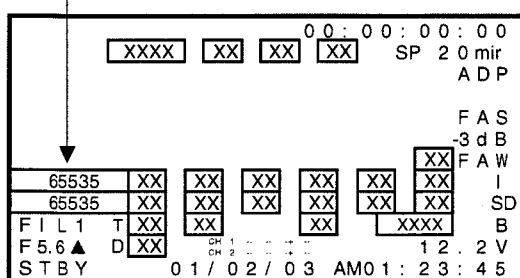
ERROR RATE MONITOR screen

By setting "DIP SW 0" to "1", error rate and each CPU port information display screen will appear on the LCD monitor, View finder and monitor.

The values which are pointed by arrow are the error rate value. Error rate of CH-1 shown in upper row, and ch-2 shown in lower row, and these value are indicated total AUDIO/VIDEO error rate.

When the error rate increase, the warning message "HEAD CLEANING REQUIRED" is displayed. And this message is indicate when the error rate value is over 4,500 (one-channel AUDIO/VIDEO total) for 7 seconds consecutively.

ERROR RATE indicator



1.9.10 HOUR METER

In a service menu, place the cursor on "HOUR METER " and push the SHUTTER dial to display the HOUR METER menu.

--- HOUR METER[1/2]---	
▷ DRUM	CLEAR
TOTAL DRUM	000000
POWER	000000
CAPSTAN	000000
REEL FWD	000000
REEL FWD	000000
NEXT PAGE	
PAGE BACK	

Fig. 1-9-12 (1)

--- HOUR METER[2/2]---	
▷ LOADING	CLEAR
EJECT(MINI)	000000
EJECT(STD)	000000
FWD/REV	000000
FF/REW	000000
CLAENER	000000
PAGE BACK	

Fig.1-9-12 (2)

Operation ways are almost same as CAMERA 1 menu, so please refer it

Item	Parameter
DRUM	000000 Displays the drum hour meter(maintenance for drum)
	CLEAR Deletes the drum hour meter.
TOTAL DRUM	000000 Displays the total hour meter.
	CLEAR Deletes the total hour meter. (This does not work unless the special setting)
POWER	000000 Displays the power hour meter.
	CLEAR Deletes the power hour meter.
CAPSTAN	000000 Displays the capstan hour meter.
	CLEAR Deletes the capstan hour meter.
REEL FWD	000000 Displays the reel forward hour meter.
	CLEAR Deletes the reel forward hour meter.
REEL REV	000000 Displays the reel reverse hour meter.
	CLEAR Deletes the reel reverse hour meter.
LOADING	000000 Displays the loading count.
	CLEAR Deletes the loading count.
EJECT (MINI)	000000 Displays the eject count for mini cassette.
	CLEAR Deletes the eject count for mini cassette.
EJECT (STD)	000000 Displays the eject count for standard cassette.
	CLEAR Deletes the eject count for standard cassette.
FWD/REV	000000 Displays the forward/reverse switching count.
	CLEAR Deletes the forward/reverse switching count.
FF/REW	000000 Displays the FF/REW switching count.
	CLEAR Deletes the FF/REW switching count.
CLEANER	000000 Displays the cleaner working count.
	CLEAR Deletes the Cleaner working count.

Table 1-9-10

1.9.11 ERROR HISTORY

In a service menu, place the cursor on "ERROR HISTORY " and push the SHUTTER dial to display the ERROR HISTORY menu.

```
--- ERROR HISTORY ---
▷ (HISTORY-1) 7101
  CAP MOTOR FAILURE
(HISTORY-2) 7101
  CAP MOTOR FAILURE
(HISTORY-3) 7101
  CAP MOTOR FAILURE
(HISTORY-4) 7101
  CAP MOTOR FAILURE
  CLEAR      CANCEL
  PAGE BACK
```

Fig.1-9-13

- (1) Rotate the SHUTTER dial to move the cursor onto the item to show details.
- (2) Push the SHUTTER dial so that the details of ERROR HISTORY is showed.
- (3) Rotate the SHUTTER dial to move cursor onto the "CLEAR", push the SHUTTER dial, then ERROR HISTORY will be deleted.

Note :

ERROR HISTORY was stored from "HISTORY-1" box to "HISTORY-4"box. Latest error was stored "HISTORY-4" box, and if there will be occur another error then latest error history will be rewrite on "HISTORY-4". From "HISTORY-1" to "HISTORY-3" will not rewrite, except to "CLEAR" operation.

1.9.12 Detail indication of ERROR HISTORY

In a ERROR HISTORY display, place a cursor onto the item and push SHUTTER dial, then detail display (MECHANISM INFO) picture will be shown.

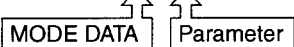
MECHANISM INFO has 2 pages.

```
--- MECHANISM INFO 1/2---
P.TM 000000H
SYS MODE:PLAY(01.00)
MSD MODE:PLAY(01.00)
      ->STOP(00.00)
LAST MEY:PLAY(01.00)
TAPE REM[0000]
DEW [00] TEMP[00]
DIAMETER TU[00]SP[00]
NEXT PAGE
▷ PAGE BACK
```

Fig.1-9-14 (1)

```
--- MECHANISM INFO 2/2---
M.POSI BRK2FAST>BRK2FAST
H.POSI INIT >CASS IN
CAP[OFF FWD]REL[OFF FWD]
TU [ON] SP[OFF] DRM[OFF]
DRV[00]CAPV[00] RELV[00]
MCV[00]REL[00]
BGN[OFF]END[ON] CAS[OFF]
STD[OFF] HW[OFF] HW2[OFF]
SPL[OFF]THIN[ON]
▷ PAGE BACK
```

Fig.1-9-14 (2)

Item	Content	Displayed Content
P.TM	POWER HOUR METER	Power hour meter is display.
SYS MODE	SYSCON CPU mode when error occurred PLAY (03, 00) 	SFF/SREW parameter is speed display. (Refer to Table 1-9-11 (2) Speed parameter) Parameters of other modes are irrelevant. EJECT (01) : Eject ADUB (0B) : Audio Dub STOP (02) : Stop ADBP (0C) : Audio Dub Pause PLAY (03) : Play REC (13) : Rec STL (04) : Still RECP (14) : Rec Pause FF (05) : FF DVRC (15) : DV Rec REW (06) : Rew DVRP (16) : DV Rec Pause SFF (07) : Search Fwd POFF (1A) : Power Off SREW (08) : Search Rev NDEF (1F) : During initial operation SFF/SREW parameter is speed display (See Table 1-9-11 (2))
MSD MODE	MSD CPU mode and target mode when error occurred PLAY (01, 00) 	
LAST KEY	Final Key code when error occurred PLAY (E7, 01) 	Other parameters are 01: ON, 00: OFF REC (E0) : Rec SFF (EB) : Search Fwd RECP (E1) : Rec Pause SREW (EC) : Search Rev DVRP (E2) : DV Rec Pause STOP (F0) : Stop ADUB (E5) : Audio Dub EJECT (F1) : Eject ADBP (E6) : Audio Dub Pause HWUP (F2) : Housing Up PLAY (E7) : Play HWDN (F3) : Housing Down STL (E8) : Still POFF (F4) : Power Off FF (E9) : FF DVRC (F5) : DV Rec REW (EA) : Rew PON (FA) : Power on
TAPE REM	TAPE REMAIN	Displays tape remaining in minutes ([FFFF] : not detected)
DEW	DEW sensor A/D intake value	DEW display at over [48]
TEMP	Temperature sensor A/D intake value The value "49" [5°C] is threshold of detecting low temperture. The value "DC" [60°C] is the threshold of displaying "OVER HEATING" message.	Temperature is displayed in hexadecimal value. -10°C ➡ [22] 20°C ➡ [7C] 50°C ➡ [CC] -5°C ➡ [2D] 25°C ➡ [8C] 55°C ➡ [D4] 0°C ➡ [3A] 30°C ➡ [9C] 60°C ➡ [DC] 5°C ➡ [49] 35°C ➡ [AA] "OVER HEATING" message 10°C ➡ [59] 40°C ➡ [B7] 65°C ➡ [E1] 15°C ➡ [6A] 45°C ➡ [C2] 70°C ➡ [E6]
DIAMETER	Displays wound tape diameter (Take-up, Supply)	[00]—[FF] : 0mm-82mm (Diameter) ([00] is non-detected)
M. POSI	Mechanism position and target mechanism position	[2ULD], [ULD2BRK], [BRK], [BRK2FAST], [FAST], [FAST2STP], [STP], [STP2SRH], [SRH], [SRH2], [INIT] ("2" is the meaning of "To". It means transition. Refer to section 2, Mechanism Timing Chart)
H. POSI	Housing position and target housing position	[EJECT], [EJECT2IN], [CASS IN], [RELEASE](Release the SUP reel lock.) [INIT](For the intake and eject operation, refer to section 8.2.3.)
CAP	Capstan status	[ON] : Rotate [FWD/REV]: Direction display [OFF] : Stop
REL	Reel status	[ON] : Rotate [FWD/REV]: Direction display [OFF] : Stop
DRM	Drum status	[ON] : Rotate [OFF] : Stop
DIR	Direction of tape running (Direction of target)	[FWD/REV]: Direction display
DRV	Drum control voltage	[00-FF] : 0—3V
CAPV	Capstan control voltage	[00-FF] : 0—3V
RELV	Reel control torque value	[00-FF] : 0—3A

Item	Content	Displayed Content															
MCV/SPD	Loading/cassette housing control voltage (when error code 4xxx and error code 3xxx is displayed.)	[00-FF] : 0—8V (Displays mode motor control voltage during error code 3xxx) (Displays cassette motor control voltage during error code 4xxx)															
	Tape speed (When the code excepting error code 4xxx and error code 3xxx is displayed.)	[00-FA] : 0—25X (FF is displayed when the speed is faster than this.) “Tape speed” is a function to convert the hexadecimal value into a decimal value, and no speed parameter of the tape. (ex. FAh = 250 → The speed is 25.0X.)															
RELI	Reel current (Cassette housing motor current only during housing-related warning)	[00-FF] : 0—1.2A															
BGN	Begin sensor	[ON] : Leader tape detected [OFF] : Magnetic tape detected															
END	End sensor	[ON] : Trailer tape detected [OFF] : Magnetic tape detected															
CAS	Cassette SW status	[ON] : No cassette [OFF] : Cassette detected (STD/MINI)															
STD	Standard cassette SW status	[ON] : Mini cassette tape inserted [OFF] : STD cassette tape inserted															
HW, HW2	Housing SW/Housing 2SW status	<table border="1"> <thead> <tr> <th>HW SW</th><th>HW2 SW</th><th>Housing status</th></tr> </thead> <tbody> <tr> <td>[ON]</td><td>[OFF]</td><td>➡ 0</td></tr> <tr> <td>[OFF]</td><td>[ON]</td><td>➡ EJECT Initial position</td></tr> <tr> <td>[ON]</td><td>[ON]</td><td>➡ Cassette intake</td></tr> <tr> <td>[OFF]</td><td>[OFF]</td><td>➡ Ejecting Mini cassette</td></tr> </tbody> </table>	HW SW	HW2 SW	Housing status	[ON]	[OFF]	➡ 0	[OFF]	[ON]	➡ EJECT Initial position	[ON]	[ON]	➡ Cassette intake	[OFF]	[OFF]	➡ Ejecting Mini cassette
HW SW	HW2 SW	Housing status															
[ON]	[OFF]	➡ 0															
[OFF]	[ON]	➡ EJECT Initial position															
[ON]	[ON]	➡ Cassette intake															
[OFF]	[OFF]	➡ Ejecting Mini cassette															
SPL	SUP Lock SW status (during loading)	[ON] : Normal operation (TU side tape winding) [OFF] : Lock release (Tape begin detected, Supply side tape winding mode)															
THIN	Thin tape detection	[ON] : THIN [OFF] : NORMAL															

Table 1-9-11 (1) MECHANISM INFO content

Parameter	Speed	Parameter	Speed
00	x 0	82	x 1.08
1F	x 0.03	83	x 1.11
40	x 0.10	84	x 1.12
53	x 0.20	85	x 1.16
61	x 0.30	91	x 2.00
6D	x 0.50	A9	x 5.00
7A	x 0.80	BD	x 9.00
7B	x 0.84	C0	x 10.0
7D	x 0.90	C4	x 12.0
7F	x 0.96	CC	x 15.0
80	x 1.00	D3	x 20.0
81	x 1.04		

Table 1-9-11 (2) Speed parameter

Error code	Display	Content of occurrence	Method of detection	Detected signal
0201	CONDENSATION ON DRUM	DEW detected	If DEW sensor detects condensation	IC302 (MSD) –detects voltage of pin 318
3200	LOADING FAILURE	Does not load	If mechanism position does not move in loading direction within 5 seconds	IC302 (MSD) –detects output of pin 354, rotary encoder
3300	UNLOADING FAILURE	Does not unload	If mechanism position does not move in unloading direction within 5 seconds	IC302 (MSD) –detects output of pin 354, rotary encoder
	No display	Does not intake	If intake is not completed within 5 seconds (Ejects without warning)	IC302 (MSD) –pin 84, CASSETTE SW is not detected within 5 seconds
4100	CASSETTE EJECT FAILURE	Does not eject	If eject is not completed within 5 seconds	IC302 (MSD) –pin 26, HOUSING SW is not detected within 5 seconds
5605	DEFECTIVE TAPE	Tape abnormality during intake	If begin or end side sensor is ON after intake	IC302 (MSD) –pin 278, START sensor and pin 297, END sensor are both detected
5606	DEFECTIVE TAPE	Tape tear during unloading	If reel FG is excessive during unloading	IC302 (MSD) –pin 75, TU REEL FG is detected
5607	DEFECTIVE TAPE	Tape tear during loading	If reel FG is insufficient during loading	IC302 (MSD) –pin 75, TU REEL FG is detected
5608	DEFECTIVE TAPE	Tape tear on the loading side	If only supply side reel does not rotate during FWD/REV	IC302 (MSD) –pin 72, SUP REEL FG is not detected
5609	DEFECTIVE TAPE	Tape tear during slack takeup	If tape slack takeup is not completed within 10 seconds	IC302 (MSD) –pin 75, TU REEL FG and pin 72, SUP REEL FG are both detected
5702	TAPE END DET. ERROR	End sensor abnormality	If trailer tape sending is not completed within 3 seconds	IC302 (MSD) –pin 297, END sensor is detected for over 3 seconds
5802	TAPE BEGIN DET. ERROR	Begin sensor abnormality	If leader tape sending is not completed within 3 seconds	IC302 (MSD) –pin 278, START sensor is detected for over 3 seconds
7001	DRUM MOTOR FAILURE	Drum motor does not rotate	If drum motor does not rotate for over 4 seconds	IC302 (MSD) –pin 55, DRUM FG is not detected for over 4 seconds
7101	CAP MOTOR FAILURE	Capstan motor does not rotate	If capstan motor does not rotate for over 2 seconds	IC302 (MSD) –pin 56, CAP FG is not detected for over 2 seconds
7202	SUPPLY REEL FAILURE	SUP reel does not rotate	If SUP reel does not rotate for over 3 seconds	IC302 (MSD) –pin 72, SUP REEL FG is not detected for over 3 seconds
7203	SUPPLY REEL FAILURE	SUP side tape slack	If only SUP reel does not rotate during REV	IC302 (MSD) –pin 72, SUP REEL FG is not detected
7302	TAKE UP REEL FAILURE	TU reel does not rotate	If TU reel does not rotate for over 3 seconds	IC302 (MSD) –pin 75, TU REEL FG is not detected for over 3 seconds
7303	TAKE UP REEL FAILURE	TU side tape slack	If only TU reel does not rotate during FWD	IC302 (MSD) –pin 75, TU REEL FG is not detected
7305	TAKE UP REEL FAILURE	Tape slack during unloading	If TU reel FG is insufficient during unloading	IC302 (MSD) –pin 75, TU REEL sensor is detected
7401	REEL MOTOR FAILURE	Reel motor does not rotate	If reel motor does not rotate for more than 4 seconds during reel drive mode	IC302 (MSD) –pin 91, REEL FG is not detected for over 4 seconds

Table 1-9-11 (3) Error Code Contents

1.9.13 OTHERS menu

In a service menu, place the cursor on "OTHERS" and push the SHUTTER dial to display the OTHERS menu.

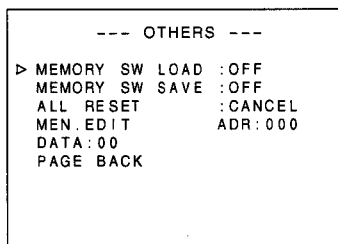


Fig. 1-9-15

Operation ways are almost same as CAMERA1 MENU, so please refer it.

Item	Parameter
MEMORY SW LOAD	☐ OFF Standard setting
	START Menu SW information is loaded from a remote domain.
MEMORY SW SAVE	☐ OFF Standard setting
	START Menu SW information is saved to a remote domain.
ALL RESET	☐ CANCEL Standard setting
	EXECUTE Resets all EEP-ROM data to default settings except adjustment data, hour meter data, and IEEE1394 ID data. Default settings at time of shipment differ by market region. I: for Japan, U: for USA, E: for EU, EC: for China
MEM.EDIT	Contents of the EEP-ROM can be edited directly ADR: Address (0-03FF) display DATA: Display of data embedded in address shown by ADR Operation procedure 1. Rotate the SHUTTER dial to move the cursor to MEM.EDIT. 2. Push the SHUTTER dial to blink the "ADR" parameter. 3. Then rotate the SHUTTER dial to adjust the specified value. 4. Next, push the SHUTTER dial to blink the DATA parameter. 5. Rotate the SHUTTER dial to adjust the specified value. 6. Finally, push the SHUTTER dial to store the data. (NOTE) Data that is crucial for the system is stored in the EEP-ROM, and making unadvised changes to it can cause the unit to stop operating correctly. Please do not use anything other than the IEEE1394 ID setting.

(☐ is default setting when shipped from factory)

Table 1-9-12 OTHERS Menu Setting Items List

1.9.14 CPU version menu

Displays version of SYSCON CPU, Camera CPU, VTR CPU, FPGA1 and FPGA2.

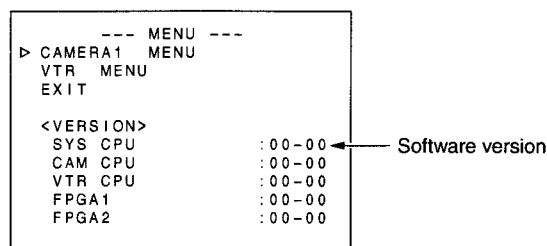


Fig. 1-9-16 CPU Version

1.9.15 EEP-ROM

(1) EEP-ROM and maintenance data

GY-DV5000 is equipped with two EEP-ROMs for the purpose of data maintenance, and their contents are as per the following list. When the circuit board or EEP-ROM is replaced, there will be no data in the EEP-ROM. When the unit is powered up, and the SYSCON CPU recognizes that there is no data in the EEP-ROM, it automatically writes initial data into the EEP-ROM to initialize it. The memory data shown in Table 1-9-12 will all be reset back to default settings, so it will be necessary to perform necessary adjustments and settings again.

EEP-ROM	Board name	Memory data content
IC301	DV/CPU board (MSD CPU)	- Adjusted data (DVC section) - IEEE1394 ID data - HOUR METER data
IC811	DBCP board	- Adjusted data - User menu and Service menu settings data - ERROR HISTORY

Table 1-9-13 EEP-ROM Memory Data Content

(2) IEEE1394 ID setting method

IEEE1394 equipped units have an ID, as defined by the IEEE1394 standard, stored in the internal EEP-ROM (IC 301). At the time of production, the ID numbers allotted to each individual unit are written into the unit's memory, and a sticker bearing the ID is affixed inside the unit. When the EEP-ROM or DV/CPU circuit board is replaced, the ID needs to be set again.

Procedure for setting IEEE1394 ID

The ID is an 8 digit, hexadecimal code, with 1 high-end Byte being the model code, and 3 low-end Bytes being unique to the unit. The model code is automatically initialized, so only the lower 3 Bytes of unique code need to be set manually. Go from Service Menu → OTHERS Menu → MEM. EDIT (Memory Edit) to select the address in the ID data section and make the setting directly. The 3 low-end Byte address is as follows. Make the setting while confirming the ID printed on the label (ID: 43xxxxxx) pasted on the inside of the GY-DV5000 (See Fig. 1-9-17).

IEEE1394 ID data : 43 xx xx xx (Indicates on the label of GY-DV5000 inside.)

↓ ↓ ↓

MEMORY Address number "391" "392" "393" (Each 1 Byte ID data are stored for every one Memory Address number.)

Setting procedure

- (1) Rotate the SHUTTER dial to move the cursor to MEM. EDIT.
- (2) Push the SHUTTER dial to make the ADR parameter blink.
- (3) Select ADR parameter "391".
- (4) Push the SHUTTER dial to make the DATA parameter blink.
- (5) Rotate the SHUTTER dial to set the ID data for ADR = "391".
- (6) Push the SHUTTER dial to confirm the DATA parameter.
- (7) In the same manner, select ADR parameter "392" and "393" to set the ID data.

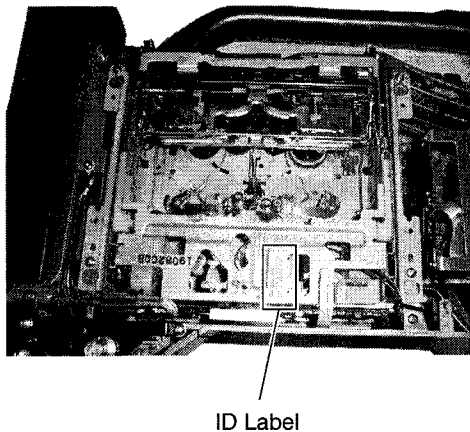
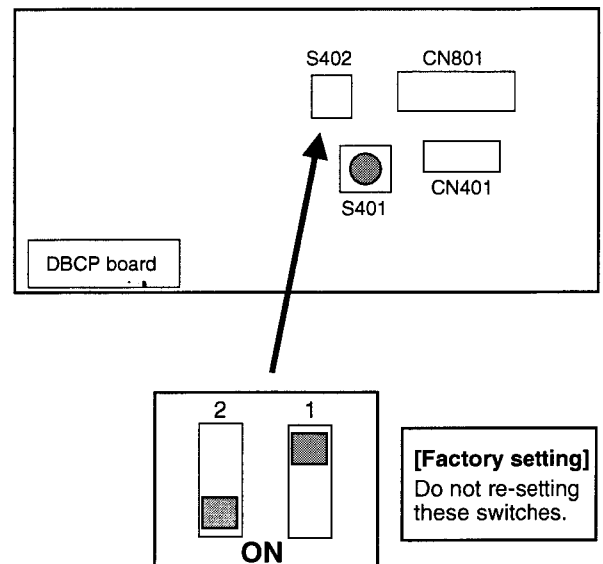


Fig. 1-9-17 ID Label Attachment Position

1.10 SWITCHES ON DBCP BOARD

S401, S402 and CN401 are prepared to use for factory production line, usually never use for adjustment after repair or maintenance, so please do not touch their and keeping on the factory setting .

1.10.1 Board location



CAUTION

If there will be changed any setting except factory position, it will occur any problem for FPGA (Field Programmable Gate Array) on DBCP board (IC401,301), cause of the Flash ROM IC which is stored the program for FPGA will be damaged or erased.

If the both small switches S402- 1 and 2 set to down ward (ON position), and push S401 tact switch, then Flash ROM will be erased. Be careful and never do it.

1.11 HOW TO TAKE OUT THE CASSETTE TAPE IN CASE OF EMERGENCY

An emergency system on this unit enables the cassette tape to be taken out manually.

When a cassette tape is stuck, take it out as described below.

- (1) In order to turn the mode motor, turn the gear ① (red color) in the direction of the arrow. While turning the gear also push it in to drive loading/unloading.

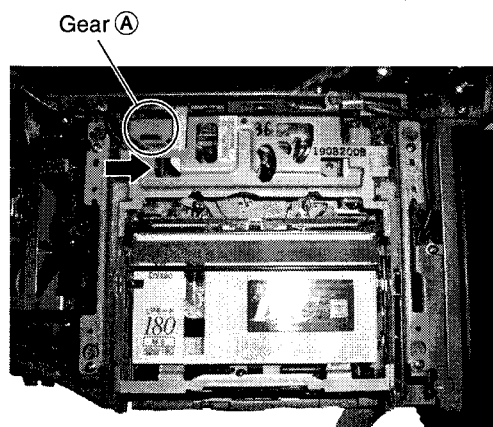


Fig. 1-11-1

- (2) To wind the tape, when the tape is loosened a little, put a screw driver in the emergency gear ②, which drives the reel. (The drive direction does not matter.)

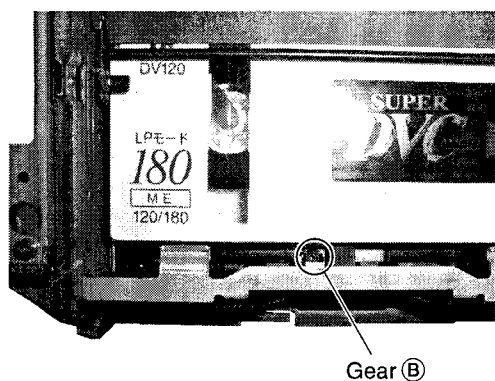


Fig. 1-11-2

- (3) Repeat steps (1) and (2) alternately and little by little until the tape is wound completely into the cassette.

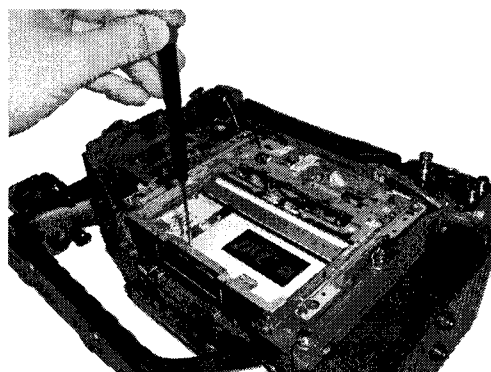


Fig. 1-11-3

- (4) Confirm that the tape is completely wound. Then, turn the gear ③ (red color) in the direction of the arrow to eject the cassette housing. Take the cassette out when it comes out of the loading slot.

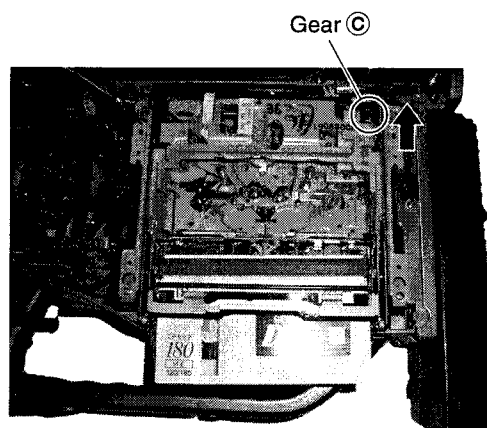


Fig. 1-11-4

SECTION 2 MECHANICAL ADJUSTMENTS

2.1 BEFORE ADJUSTMENTS

2.1.1 Precautions

- 1) Be sure to apply a screw securing torque when attaching a part.
The securing torque should be 0.14 N/m (1.4 kgf/cm) unless otherwise specified.
- 2) Always unplug the power cord of the set before attaching, removing or soldering a part.
- 3) When unplugging a connector, do not pull the wire but grasp the connector body.
- 4) Do not make an adjustment or rotate a potentiometer blindly while the source of trouble is not identified.
- 5) Before adjusting electrical circuitry, be sure to wait for more than 10 minutes after turning the power on.

2.1.2 Measuring instruments required for adjustments

Instrument	Condition
Oscilloscope	Calibrated instrument with measuring bandwidth of 100 MHz or more.

Table 2-1-1

2.1.3 Equipment required for adjustments

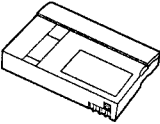
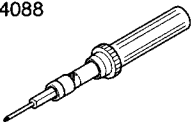
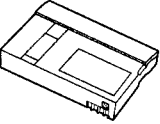
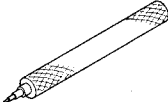
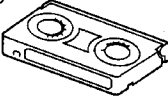
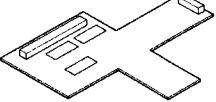
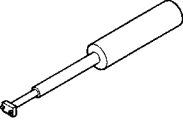
1	Alignment tape MC-1 (NTSC) MC-2 (PAL) 	5	Torque screwdriver YTU94088  YTU94088-003  Replaceable bit (long type)
2	DV tape For use in self-recording/playback. (60 ME) (270 ME) 	6	Slit washer attaching tool YTU94121A 
3	Cassette torque meter YTU94150A (or YTU94151A) for FWD mode KLJ0312 for REV mode 	7	REWRITE board (Connector board) CK453800B 
4	Guide screwdriver YTU94085 	8	Chip IC replacement tool PTS40844-2 

Table 2-1-2

2.2 DISASSEMBLY/ASSEMBLY OF THE MECHANISM

2.2.1 Mechanism position for disassembly/assembly

The mechanism should basically be disassembled and assembled in the unloading end (No Cassette) position. However, other mechanism position is sometimes required for disassembly or assembly. In such a case, the required position is specified every time in the descriptions in 2.6, "Replacement of major parts".

2.2.2 Mode transition

To change the mechanism mode manually, rotate the emergency gear of the mode motor assembly shown in Fig. 2.2.1 as below. The mechanism mode can be changed by applying 3 V DC to the mode motor electrodes.

The MINI and STD reel positions can be changed over by manually sliding the reel change plate.

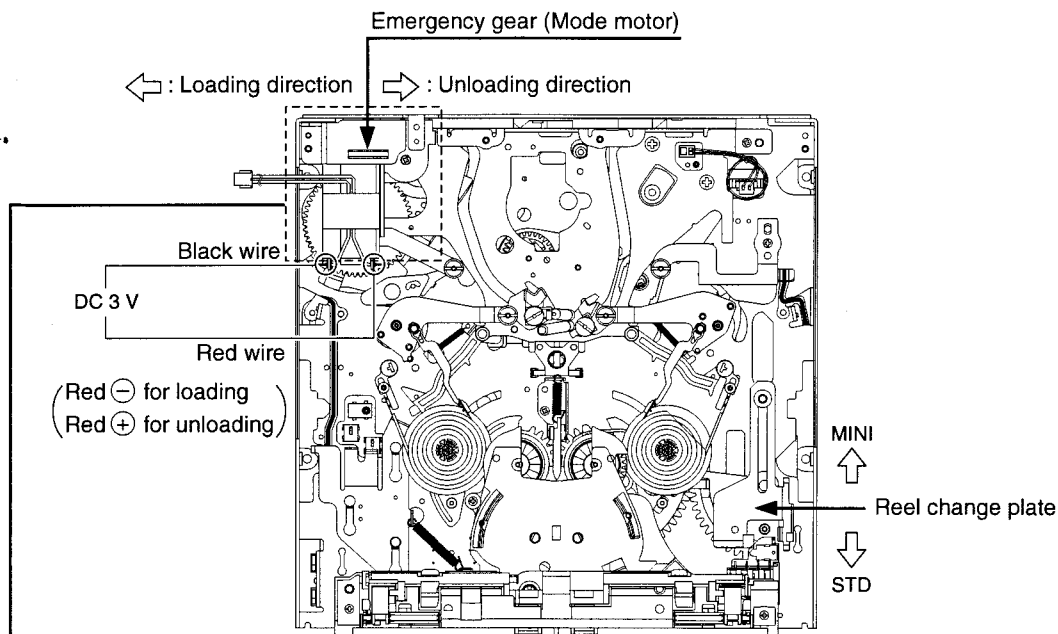


Fig. 2.2.1

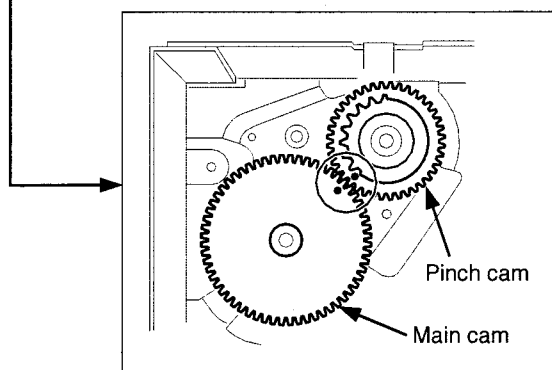


Fig. 2.2.2

Important:

When turn the Emergency gear (Mode) to Unloading direction by hand until the hole of the Main cam and the hole of the pinch cam in a straitline connecting. (refer to Fig.2.2.2)

Please do not turn the Emergency gear (Mode) more than the above.

2.3 MECHANISM TIMING CHART

See Table 2-3-1 below.

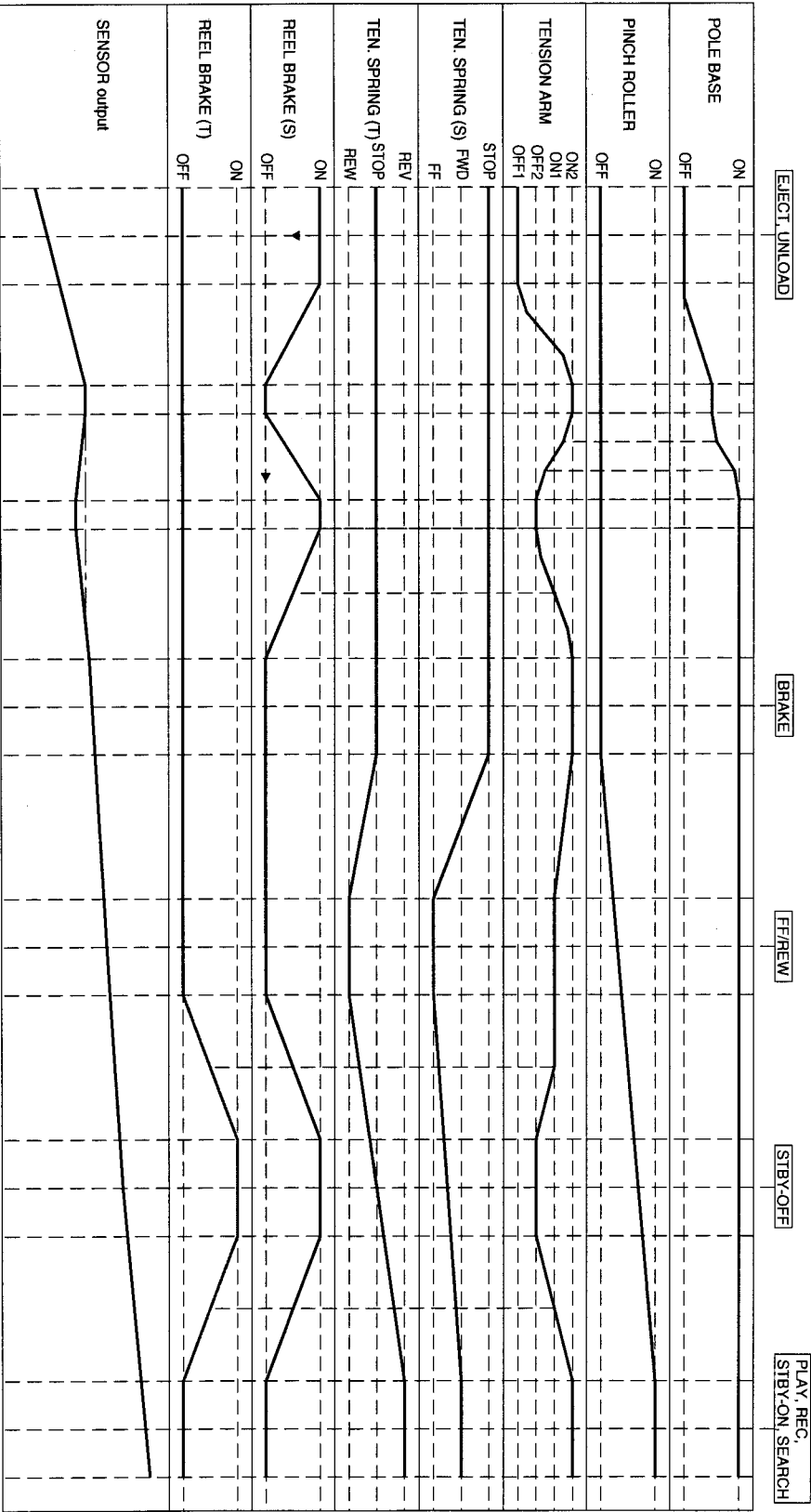


Table 2-3-1

2.4 MAINTENANCE AND INSPECTION OF MAJOR PARTS

Periodical inspection and maintenance are requisite to maintain the initial performance and reliability of the product. Table 2-4-1 (Maintenance & Inspection List) has been compiled assuming standard operating conditions, and the specifications in the table are greatly variable depending on the actual operating environment and conditions. Remember that, if the maintenance and inspection are not enforced properly, the operating hours of

the product will not only reduce considerably but other unfavorable influences may produce.

Rubber parts may deform or degrade after long period of storage even if they are not used in this period.

The service life of the drum is variable depending on the tape used and operating environment.

2.4.1 Layout of Major Parts

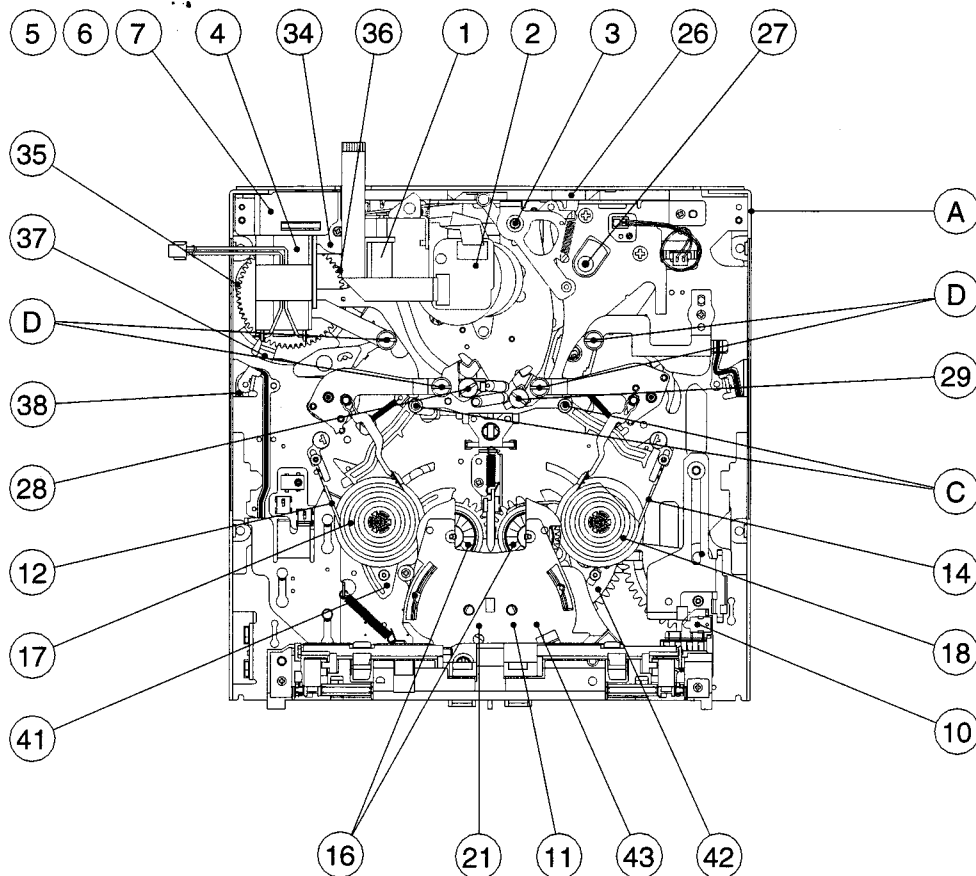


Fig. 2.4.1

2.4.2 Maintenance/inspection table

1) Replace the whole mechanism assembly in the 6000H maintenance.

2) The SUP/TU tension arm assemblies, sub-deck assembly (ENT. G. roller section) and EGR ARM assembly have undergone perpendicularity management after being assembled. If any of the above assemblies needs replacement, the whole mechanism assembly should be replaced.

	Part Name	Symbol No.	Operating Hours (DRUM Hour Meter)												Ref. Section
			500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	
1	28 SUP P. BASE ASSEMBLY	M 3 66	★	○★	★	●	★	○★	★	●	★	○★	★	—	2.6.17
2	29 TU P. BASE ASSEMBLY	M 3 67	★	○★	★	●	★	○★	★	●	★	○★	★	—	2.6.17
3	D GUIDE ROLLER	M 3 30	★	○★	★	●	★	○★	★	●	★	○★	★	—	2.4.1
4	D COLLER	M 3 31	★	○★	★	●	★	○★	★	●	★	○★	★	—	2.4.1
5	D FRANGE	M 3 32	★	○★	★	●	★	○★	★	●	★	○★	★	—	2.4.1
6	3 PINCH R.ARM ASSEMBLY	M 3 4	★	○★	★	●	★	○★	★	●	★	○★	★	—	2.6.3
7	2 DRUM ASSEMBLY	M 3 80	★	★	★	●	★	★	★	●	★	★	★	—	2.6.2
8	27 CAPSTAN SHAFT	M 3 64	★	★	★	★	★	★	★	★	★	★	★	—	
9	27 CAPSTAN MOTOR	M 3 64	—	—	—	—	—	—	—	—	—	○	—	—	2.6.16
10	21 REEL MOTOR	M 3 24	—	—	—	—	—	—	—	—	—	○	—	—	2.6.13
11	10 M.I.C. terminal	M 3 51	★	★	★	★	★	★	★	★	★	★	★	—	
12	10 M.I.C. CONNECTOR	M 3 51	—	—	—	—	—	—	—	—	—	—	—	—	2.6.6
	43 FPC 1 ASSEMBLY	M 3 49	★	★	★	★	★	★	★	★	★	★	★	—	2.6.25
	11 IDLER COVER	M 3 52	—	—	—	—	—	—	—	—	—	—	—	—	2.6.7
13	C CASSETTE GUIDE PIN		★	★	★	★	★	★	★	★	★	★	★	—	2.4.1
15	4 MODE MOTOR ASSEMBLY	M 3 47	—	—	—	—	—	—	—	—	—	—	—	—	2.6.4
16	35 MAIN CAM	M 3 12	—	—	—	—	—	—	—	—	—	—	—	—	2.6.20
17	6 GEAR 1	M 3 44	—	—	—	—	—	—	—	—	—	—	—	—	2.6.4
18	7 GEAR 2	M 3 45	—	—	—	—	—	—	—	—	—	—	—	—	2.6.4
19	5 WORM WHEEL	M 3 46	—	—	—	—	—	—	—	—	—	—	—	—	2.6.4
20	34 PINCH CAM GEAR	M 3 13	—	—	—	—	—	—	—	—	—	—	—	—	2.6.20
21	26 PINCH PLATE	M 3 17	—	—	—	—	—	—	—	—	—	—	—	—	2.6.16
22	38 CTL. PLATE	M 3 9	—	—	—	—	—	—	—	—	—	—	—	—	2.6.22
23	37 CTL. ARM ASSEMBLY	M 3 56	—	—	—	—	—	—	—	—	—	—	—	—	2.6.21
24	36 ARM GEAR	M 3 11	—	—	—	—	—	—	—	—	—	—	—	—	2.6.21
25	41 SUP REEL PLATE ASSEMBLY	M 3 54	—	—	—	—	—	—	—	—	—	—	—	—	2.6.24
26	42 TU REEL PLATE ASSEMBLY	M 3 55	—	—	—	—	—	—	—	—	—	—	—	—	2.6.24
27	17 SUP REEL DISK ASSEMBLY	M 3 35	—	○	—	●△	—	○	—	●△	—	○	—	—	2.6.10
28	18 TU REEL DISK ASSEMBLY	M 3 36	—	○	—	●△	—	○	—	●△	—	○	—	—	2.6.10
29	16 CONN. GEAR ASSEMBLY	M 3 37	—	○	—	●△	—	○	—	●△	—	○	—	—	2.6.10
30	12 SUP TENSION BAND ASSEMBLY	M 3 38	—	○	—	●	—	○	—	●	—	○	—	—	2.6.8
31	14 TU TENSION BAND ASSEMBLY	M 3 39	—	○	—	●	—	○	—	●	—	○	—	—	2.6.9
32	11 IDLER ARM ASSEMBLY	M 3 40	—	○	—	●	○	○	—	●	—	○	—	—	2.6.7
33	1 HEAD CLEANER	M 3 5A	○	●	○	●	—	●	○	●	○	●	○	—	2.6.2
34	B CASSETTE HOUSING ASSEMBLY	M 3 90	—	—	—	—	—	—	—	—	—	—	—	—	2.6.1
35	A MECHANISM ASSEMBLY	M 3 1	—	—	—	—	—	—	—	—	—	—	—	●	

★: Clean with ethyl alcohol. ○: Check and replace if required. ●: Replace. △: Oil the shaft.
After replacing a part, apply lubricant to the required points.

Table 2-4-1

2.4.3 Cleaning

The tape transport system should be cleaned periodically. Be sure to clean the tape transport system upon receipt of a set for servicing, etc. To clean use a good quality fine-textured cloth moistened with ethyl alcohol.

- 1) When the video head is stained, the playback output level decreases and a read error will not be able to be corrected by the error correction. If this occurs, block noise appear on the monitor, the audio will not be output, and the video output will eventually be lost when the video head becomes extremely dirty. To clean the drum, while applying cleaning cloth (service part No. : KSMM-01) or high quality paper gently to the upper drum, rotate the upper drum in the normal (counterclockwise) rotation direction.
The dirt deposited on the video head can be removed by playing a cleaning tape.

CAUTION

Do not move the cleaning paper while applying it to the video head. Otherwise, the video head may be damaged.

- 2) The lower drum tends to attract dirt on the leader section and the linearity cannot be guaranteed when the lower drum becomes extremely dirty. Particularly, the tape inlet and output sections gather dirt easily, causing symptoms such as dropout of the reproduced FM signal, deterioration of video quality and lack of audio output. In order to clean the leader section, rub a cotton swab gently along its edge.

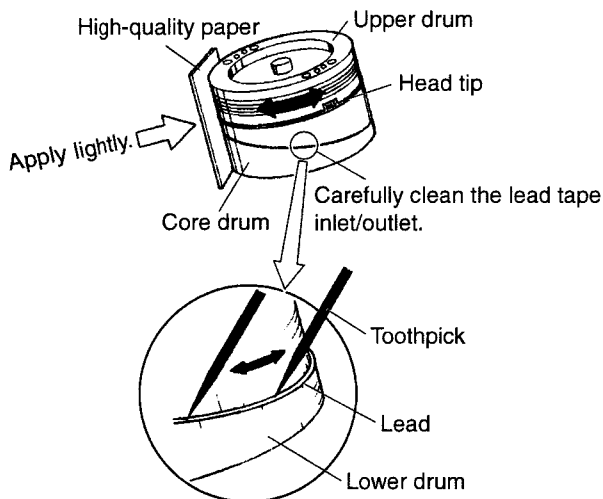


Fig. 2.4.2

- 3) Stain of the tape transport system leads to tape damage. When magnetic dust or dirt penetrates inside the rollers, a rotation malfunction may affect the video. Clean the tape transport parts carefully using a cleaning cloth or cotton swab moistened with ethyl alcohol.

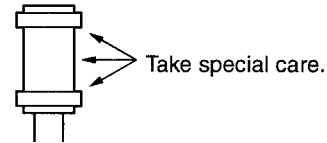


Fig. 2.4.3

2.4.4 Oiling and Greasing

Table 2-4-2 shows the oil and greases used with the set.

Classification	Name	Part No.
Oil	Cosmo Hydro HV100	YTU94027
Grease	Maltemp SH-P	KYODO-SH-P
	Hanal	RX-410R

Table 2-4-2

- 1) Oiling should be performed periodically. Oil the shafts by referring to the maintenance table.
- 2) After replacing a part, grease the required points. For the parts to be greased see the exploded diagram in chapter 5, "DISASSEMBLY DRAWINGS AND PARTS LIST".
- 3) As Hanal separates over time, be sure to mix it (shake) well before use.
- 4) Take care not to leave grease or oil on the tape transport parts which come into contact with the tape or on the brake pads.
- 5) Take care not to apply too much oil or grease. The standard oiling quantity is one drop and the standard greasing quantity is the quantity with which the grease does not overflow.

2.5 PERIODICAL MAINTENANCE

Perform maintenance at the correct times in accordance with the maintenance table.

Fig. 2-5-1 shows the flow chart of periodical maintenance procedures at different operating hours.

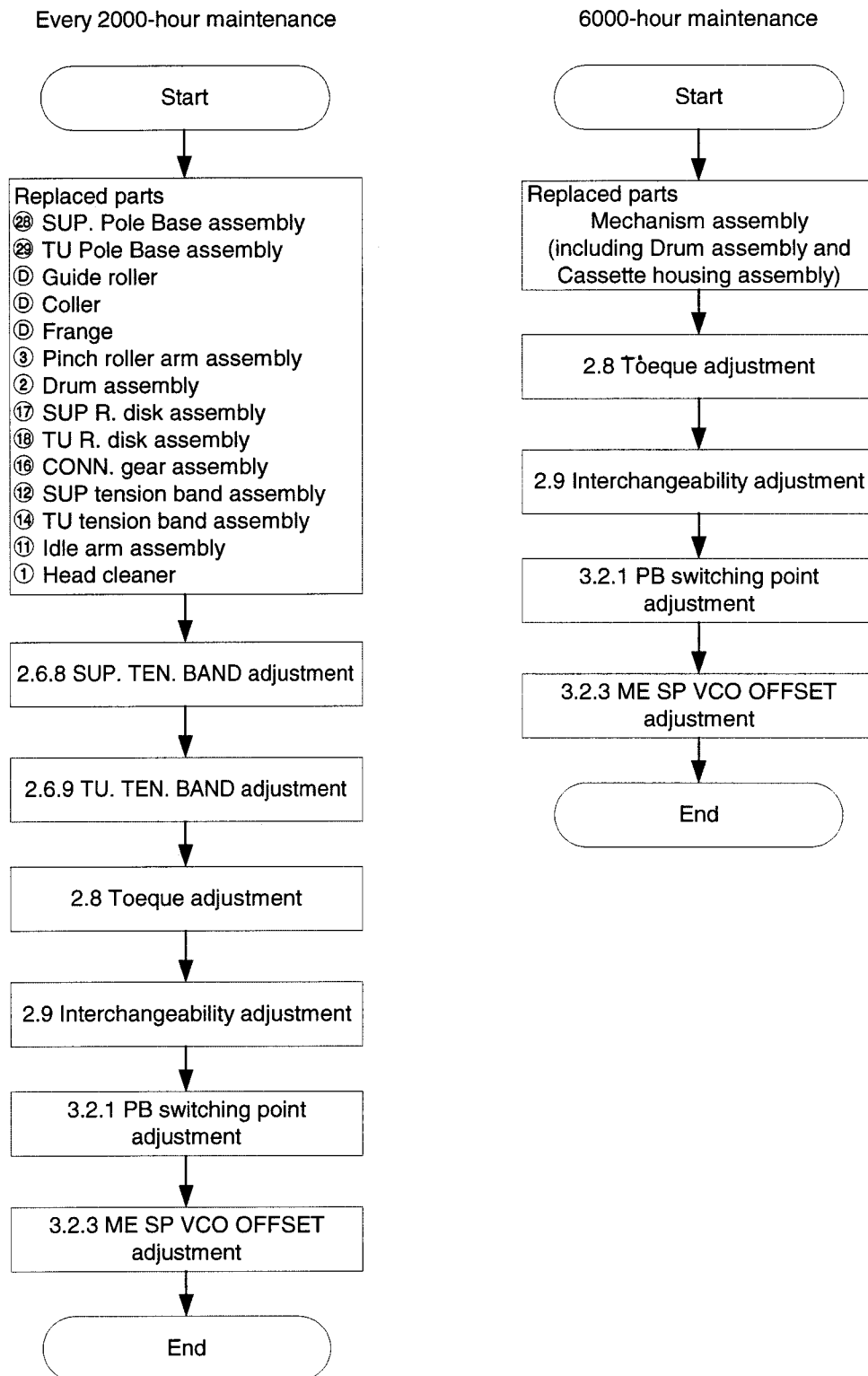


Fig. 2.5.1

No.	Item	Ref. Illustration	Procedure
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2.6 REPLACEMENT OF MAJOR PARTS

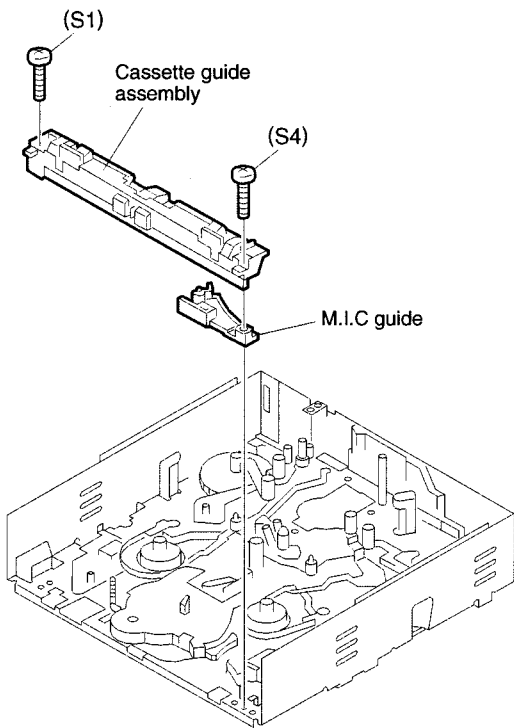
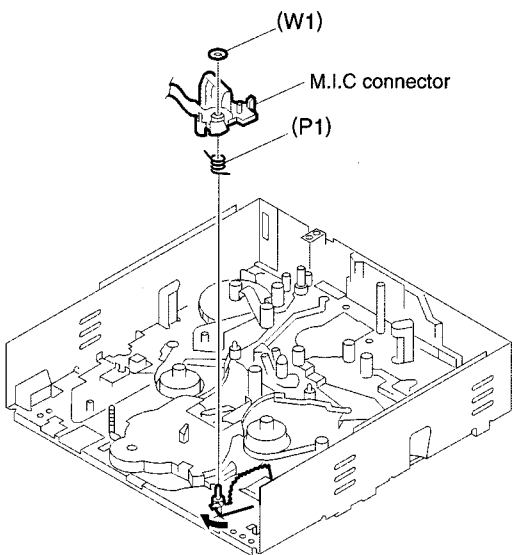
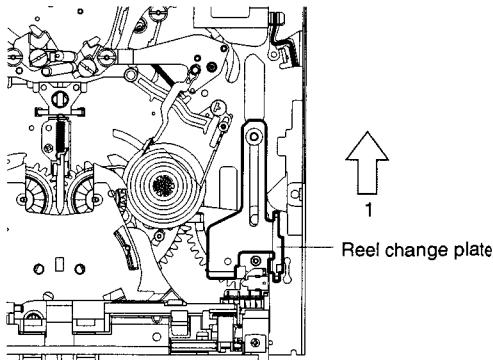
- The disassembly procedures shown in order of disassembly. To remove the part, it is necessary to have completed all the stages before it.
- Always use a torque driver and the specified securing torque to tighten screws.
- Position the mechanism to the unloading end (No Cassette) mode before disassembly or assembly unless otherwise specified.

1 ⑧ Cassette housing assembly Cassette housing assembly Manually perform the loading operation so that the cassette holder bar comes on the position of this screw. Hold this part when removing or attaching the assembly. Cassette holder Cassette holder bar (S1) Hook Look lever Hook Cassette Housing Motor Emergency Gear Fig. 2.6.1	<Disassembly> 1) Turn the cassette housing motor emergency gear in the direction of the arrow, while pushing the lock lever in the direction of arrow 2, then move the cassette holder so that the cassette holder bar comes in the position shown in the illustration. 2) Remove two screws (S1), slide the cassette housing toward the front and remove it by releasing the lock on the Hook function as shown by arrow 3. <Assembly> 1) Reverse the disassembly procedure. 2) Screws (S1) should be tightened using a securing torque of 0.2 N/m (2 kgf/cm). Note: Be sure to attach the cassette housing in the same position as when it was removed. (OK) (NG) Hook function of the Cassette housing.
2 ① Head cleaner assembly/ ② Drum assembly (S3) ② (S3) ① (S3) ③ Head cleaner assembly Drum assembly Fig. 2.6.2	<Disassembly> Head cleaner assembly: 1) Remove the screw (S2) and remove the head cleaner assembly. Drum assembly: 1) Remove the Drum FPC from the DV/CPU circuit board CN107. 2) Remove the screw (S3) and remove the drum assembly. <Assembly> 1) Reverse the disassembly procedure. 2) Drum section screws (S3) should be tightened in order of ① — ③ and using a securing torque of 0.04 N/m (0.4 kgf/cm).

No.	Item	Ref. Illustration	Procedure
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3	③ Pinch roller arm assembly	Fig. 2.6.3	<Disassembly> 1) While pushing the hook on the pinch plate, lift the pinch roller arm assembly upward to remove. <Assembly> 1) Reverse the disassembly procedure.
4	④ Mode motor assembly/ ⑤ Worm wheel 2/ ⑥ Gear 1/ ⑦ Gear 2	Fig. 2.6.4	<Disassembly> Mode motor assembly: 1) Remove the screw (S2) and remove the mode motor assembly. Worm wheel 2 & gears 1 and 2: 1) Lift the worm wheel 2 upward to remove. 2) Lift the gear 1 upward to remove. 3) Lift the gear 2 upward to remove. <Assembly> 1) Reverse the disassembly procedure. Note: Worm wheel 2 and gears 1 and 2 do not require the mechanism phase adjustment.

No.	Item	Ref. Illustration	Procedure
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5	Cassette guide assembly/ M.I.C guide  Fig. 2.6.5	<Disassembly> Cassette guide assembly: 1) Remove the screws (S1) (S4) and remove the cassette guide assembly. M.I.C guide: 1) While pushing the hook on the M.I.C guide, lift it upward to remove. <Assembly> 1) Reverse the disassembly procedure. Note: When install the M.I.C guide, the reel position should be standard cassette position.
6	⑩ M.I.C connector  Fig. 2.6.6 (1)	<Disassembly> 1) Slide the reel change plate in the direction of arrow 1 to place the reel in the mini-cassette position. 2) Remove the slit washer (W1) and remove the M.I.C connector. 3) Remove the spring (P1). <Assembly> 1) Reverse the disassembly procedure.  Fig. 2.6.6 (2)

No.	Item	Ref. Illustration	Procedure
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7 ⑪ Idler arm assembly

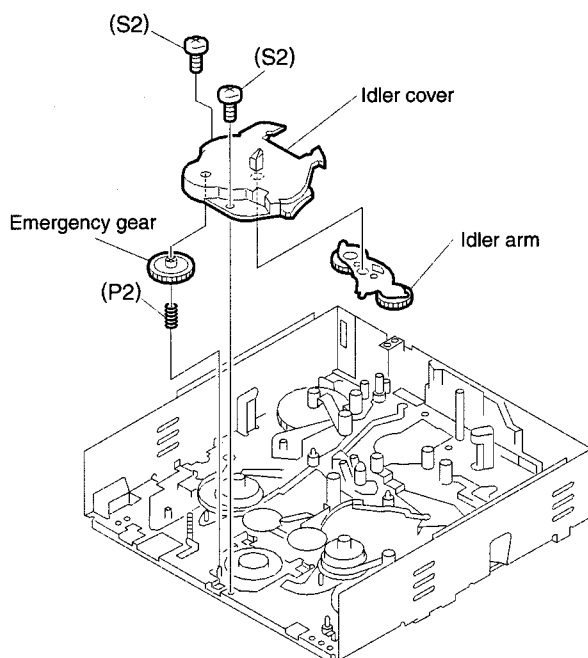


Fig. 2.6.7

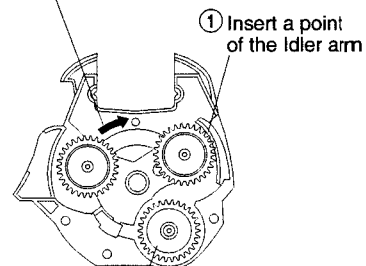
<Disassembly>

- 1) Remove the two screws (S2) and remove the idler cover.
- 2) Remove the idler arm.
- 3) Remove the emergency gear.
- 4) Remove the spring (P2).

<Assembly>

- 1) Attach the Idler arm and the Emergency gear into the Idler cover.

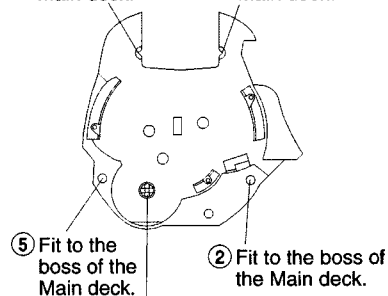
- ② Rotate the Idler arm to the clockwise direction. (Check the Idler arm moves smoothly.)



- ③ Install the Emergency gear into the Idler cover and push it lightly.

- 2) Attach the Idler arm assembly onto the Main deck.

- ④ Hook to the shaft of the Main deck.
- ① Hook to the shaft of the Main deck.



- ⑤ Fit to the boss of the Main deck.
- ② Fit to the boss of the Main deck.
- ③ Rotate the Emergency gear with screw driver then fit the gear of the Idler arm and the Reel Motor gear.

Caution : When install the Idler arm assembly into the main deck, if the gear of the Idler arm and Reel Motor gear does not fit, these gears may be damaged.

No.	Item	Ref. Illustration	Procedure
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8 ⑫ Supply tension band assembly/ Supply tension arm assembly

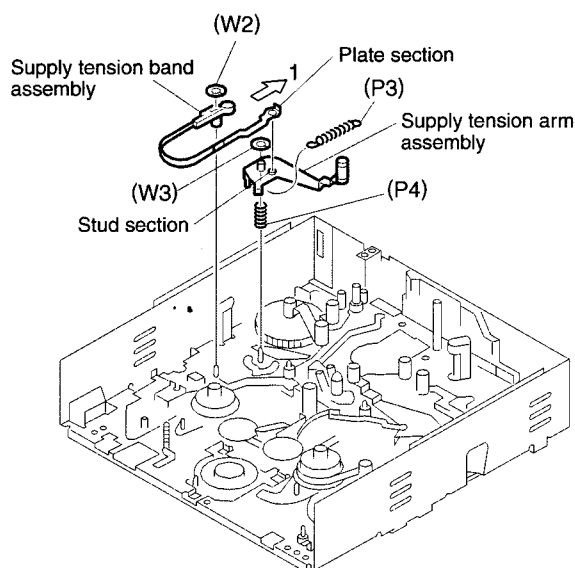


Fig. 2.6.8 (1)

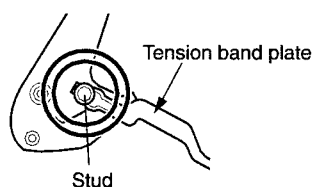


Fig. 2.6.8 (2)

<Disassembly>

Supply tension band assembly:

- 1) Remove the slit washer (W2).
- 2) Slide the tension band plate in the direction of arrow 1 and remove the plate from the tension arm stud section.

Supply tension arm assembly:

- 1) Remove the slit washer (W3) and remove the supply tension arm assembly.
- 2) Unhook the spring (P3) from the tension control arm. (See Fig. 2.6.8 (3))
- 3) Remove the spring (P4).

<Assembly>

- 1) Reverse the disassembly procedure.

Notes:

- Pinch the tension band plate and tension arm stud together and fix them. Be careful not to bend the plate during the above. (See ○ in Fig. 2.6.8 (2))
- The supply tension arm assembly has undergone perpendicularity management after being assembled, so when replacement is required, it will be necessary to replace the entire mechanism assembly.

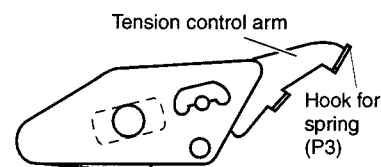


Fig. 2.6.8 (3)

<Supply tension band position adjustment>

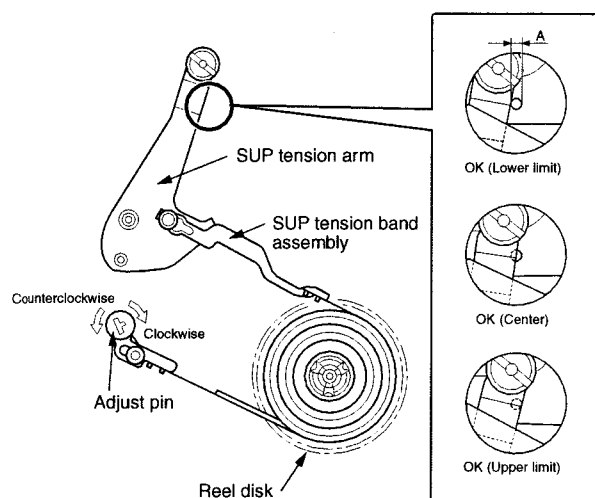


Fig. 2.6.8 (4)

- 1) With the cassette housing removed, place the reel in the mini-cassette position. (See Fig. 2.6.6 (2))
- 2) Manually rotate the emergency gear of mode motor counterclockwise (See section 2.2.2, "Mode transition".) to perform loading until the loading end position.
- 3) Ensure that the right edge of the tension arm is placed within the range of reference hole A on the sub-deck.
- 4) If the right edge is not within the above range, adjust by turning the adjust pin.

Clockwise rotation : to lower limit
Counterclockwise rotation : to upper limit

No.	Item	Ref. Illustration	Procedure
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9 ⑭ Take-up tension band assembly/ Take-up tension arm assembly

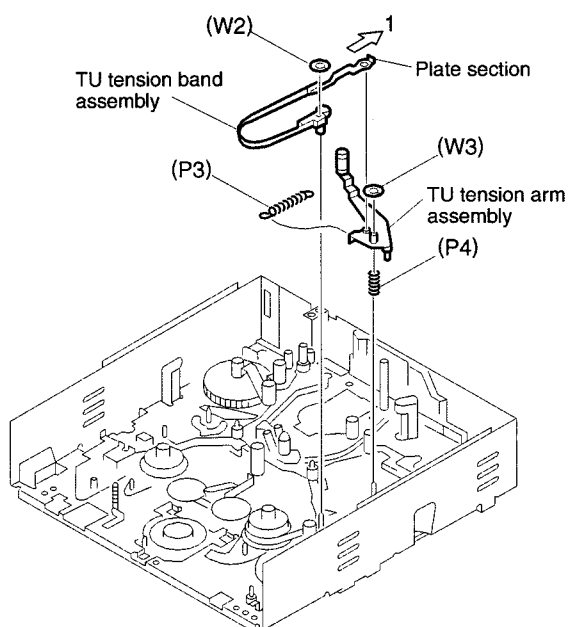


Fig. 2.6.9 (1)

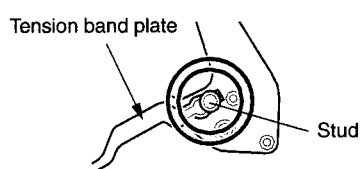


Fig. 2.6.9 (2)

<Disassembly>

Take-up tension band assembly:

- 1) Remove the slit washer (W2).
- 2) Slide the plate section of tension band in the direction of arrow 1 and remove the plate from the tension arm stud.

Take-up tension arm assembly:

- 1) Remove the slit washer (W3) and remove the supply tension arm assembly.
- 2) Unhook the spring (P3) from the tension control arm. (See Fig. 2.6.9 (3))
- 3) Remove the spring (P4).

<Assembly>

- 1) Reverse the disassembly procedure.

Notes:

- Pinch the tension band plate and tension arm stud together and fix them. Be careful not to bend the plate during the above. (See ○ in Fig. 2.6.8 (2))
- The take-up tension arm assembly has undergone perpendicularity management after being assembled, so when replacement is required, it will be necessary to replace the entire mechanism assembly.

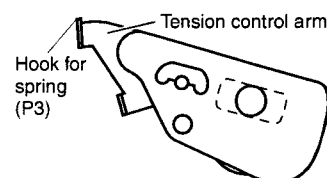


Fig. 2.6.9 (3)

<Take-up tension band position adjustment>

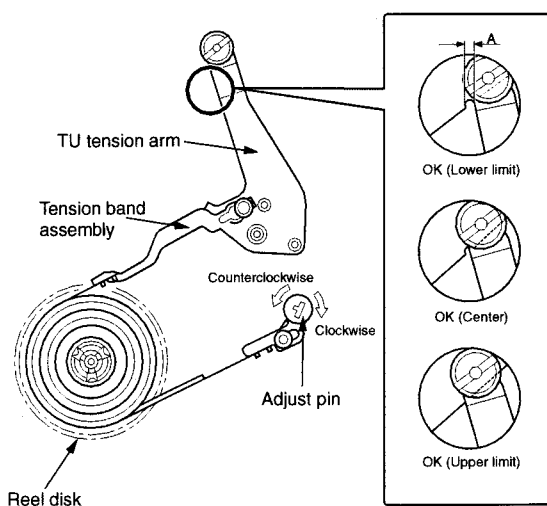
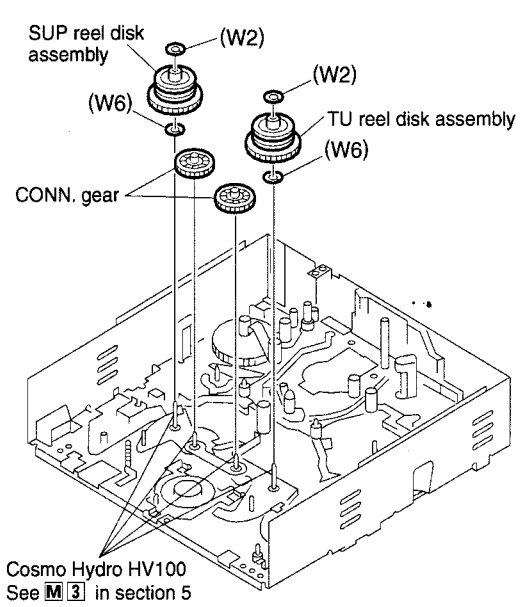
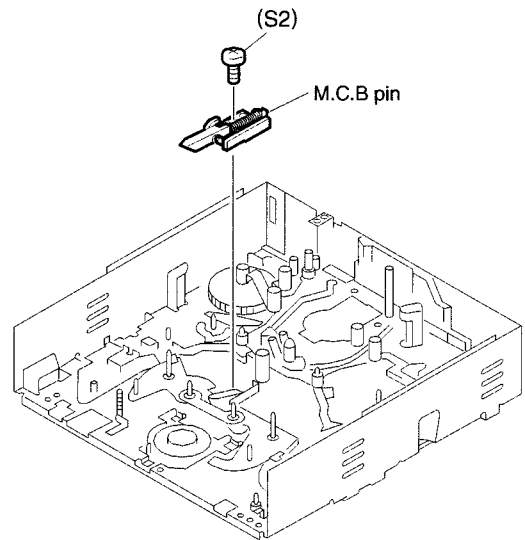


Fig. 2.6.9 (4)

- 1) With the cassette housing removed, place the reel in the mini-cassette position. (See Fig. 2.6.6 (2))
- 2) Manually rotate the emergency gear of mode motor counterclockwise (See section 2.22, "Mode transition".) to perform loading until the loading end position.
- 3) Ensure that the right edge of the tension arm is placed within the range of notch A on the sub-deck.
- 4) If the right edge is not within the above range, adjust by turning the adjust pin.

Clockwise rotation : to upper limit
Counterclockwise rotation : to lower limit

No.	Item	Ref. Illustration	Procedure
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10	⑯ CONN gear assembly/ ⑰ SUP reel disk assembly/ ⑱ TU reel disk assembly  Fig. 2.6.10	<Disassembly> CONN. gear assembly 1) Lift the two CONN gears upward to remove. SUP and TU reel disk assemblies: 1) Remove the two slit washers (W2) and lift the SUP and TU reel disk assemblies separately to remove each assembly. 2) Lift the two washers (W6) to remove. <Assembly> 1) Reverse the disassembly procedure.
11	M.C.B pin  Fig. 2.6.11	<Disassembly> 1) Remove the screw (S2) and remove the M.C.B pin. <Assembly> 1) Reverse the disassembly procedure.

No.	Item	Ref. Illustration	Procedure
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12 **Switch lever**

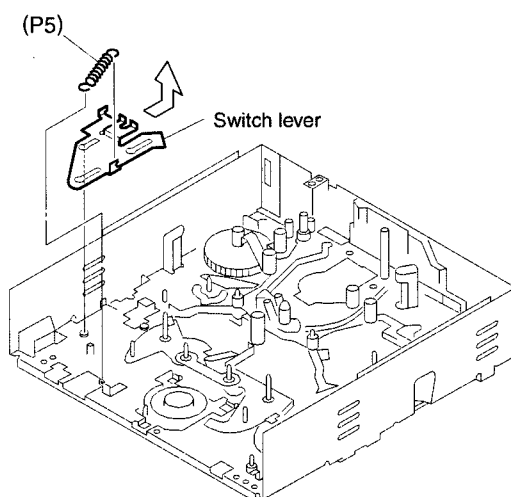


Fig. 2.6.12

<Disassembly>

- 1) Unhook the spring (P5).
- 2) Slide the switch lever in the direction of the arrow and then lift it upward to remove.

<Assembly>

- 1) Reverse the disassembly procedure.

13 **② Reel motor**

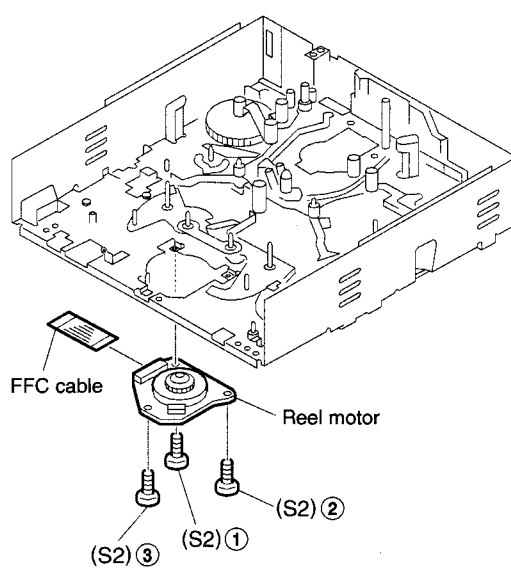


Fig. 2.6.13

<Disassembly>

- 1) Remove the FFC from the mechanism circuit board CN124.
- 2) Remove the three screws (S2) and remove the reel motor.

<Assembly>

- 1) Reverse the disassembly procedure.
- 2) Tighten the three screws (S2) in the order of ① - ③.

Note:
Be sure to have the FFC cable installed on the reel motor side before attaching.

No.	Item	Ref. Illustration	Procedure
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14	F-lock lever Long Hole Cross-section Multemp SH-P See M 3 in section 5. F-lock lever Fig. 2.6.14	<Disassembly> 1) Slide the F-lock lever in the direction of the arrow to remove. <Assembly> 1) Reverse the disassembly procedure.
15	Dew sensor/ E.G. roller arm assembly E.G. roller arm assembly (S5) (S2) DEW sensor Fig. 2.6.15	<Disassembly> Dew sensor: 1) Remove the screw (S5) and remove the DEW sensor. E.G. roller arm assembly: 1) Remove the screw (S2) and remove the E.G. roller arm assembly. <Assembly> 1) Reverse the disassembly procedure. Note: The E.G. roller arm assembly has undergone perpendicularity management after being assembled, so when replacement is required, it will be necessary to replace the entire mechanism assembly.

No.	Item	Ref. Illustration	Procedure
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16 Sub-deck/ 26 Pinch plate/ 27 Capstan motor

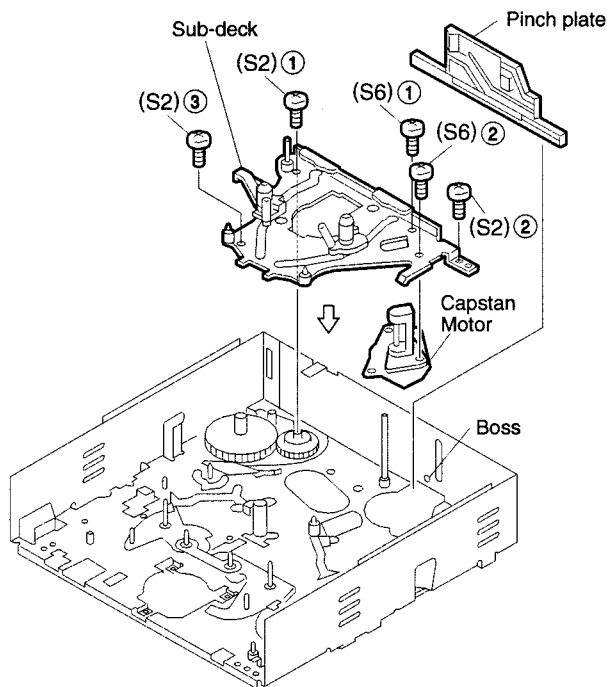


Fig. 2.6.16 (1)

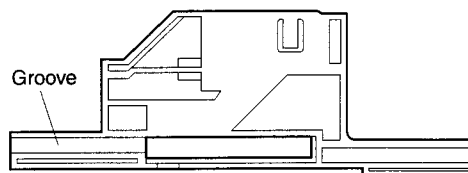


Fig. 2.6.16 (2)

<Disassembly>

Sub-deck/pin plate:

- 1) Remove the three screws (S2) and slide the sub-deck in the direction of arrow then remove it. The pinch plate also detaches at this time.

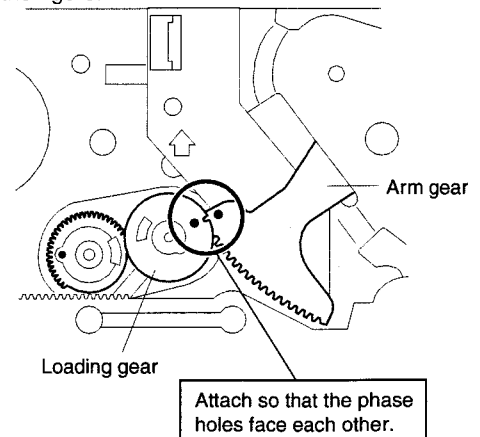
Capstan motor:

- 1) Remove the two screws (S6) and remove the capstan motor.

<Assembly>

Do this procedure in the unloading end position.

- 1) Fit the groove on the rear of the pinch plate into the boss on the main deck.
- 2) Reverse the disassembly procedure.
- 3) Attach the loading gear and arm gear so that the phase relationship between them is as shown in the figure.

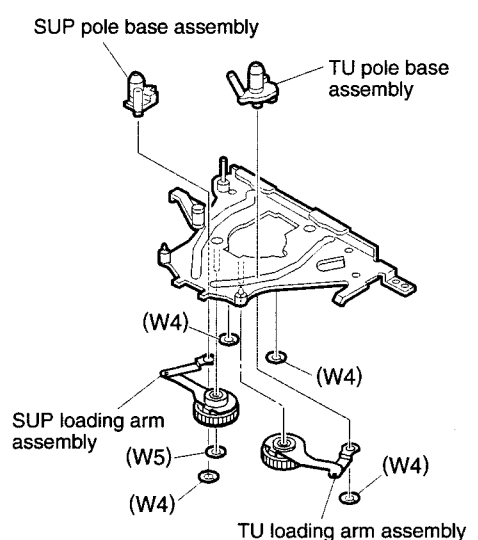
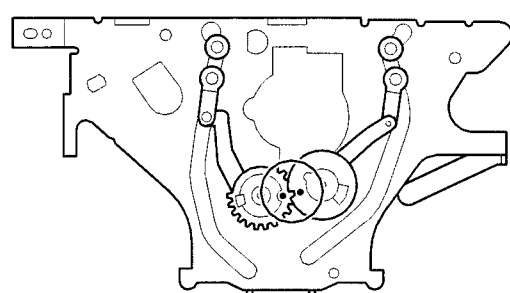


— Unloading End Position —

Notes:

- Tighten the screws (S2) of the sub deck in the order of ① - ③.
- The sub deck assembly has undergone perpendicularity management after being assembled, so when replacement is required, it will be necessary to replace the entire mechanism assembly.
- Capstan motor screws (S6) should be tightened in the order of ① - ② and using a securing torque of 0.20 N·m (2 kgf·cm).

No.	Item	Ref. Illustration	Procedure
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17	28 Supply pole base assembly/ 29 Take-up pole base assembly  Fig. 2.6.17	<Disassembly> Do this procedure in the loading end position. Supply pole base assembly: 1) Remove the two slit washers (W4) and remove the supply pole base assembly. Take-up pole base assembly: 1) Remove the two slit washers (W4) and remove the take-up pole base assembly. <Assembly> 1) Reverse the disassembly procedure.
18	Supply loading arm assembly/ Take-up loading arm assembly  Fig. 2.6.18 Sub Deck Bottom Side	<Disassembly> Do this procedure in the loading end position. Take-up loading arm assembly: 1) Remove the slit washer (W5) and remove the take-up loading arm assembly. Supply loading arm assembly: 1) After removing the take-up loading arm assembly, remove the supply loading arm assembly. <Assembly> 1) Reverse the disassembly procedure. 2) Attach so that the gear holes on the assemblies face each other.

No.	Item	Ref. Illustration	Procedure
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19 **Supply reel lock/ Take-up reel lock**

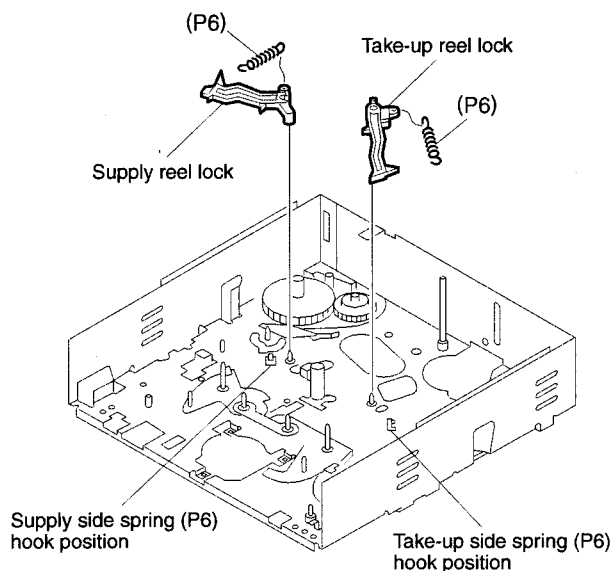


Fig. 2.6.19

<Disassembly>

Supply reel lock:

- 1) Unhook the spring (P6) and lift the supply reel lock upward to remove.

Take-up reel lock:

- 1) Unhook the spring (P6) and lift the take-up reel lock upward to remove.

<Assembly>

- 1) Reverse the disassembly procedure.

20 **③④ Pinch cam gear/ ③⑤ Main cam**

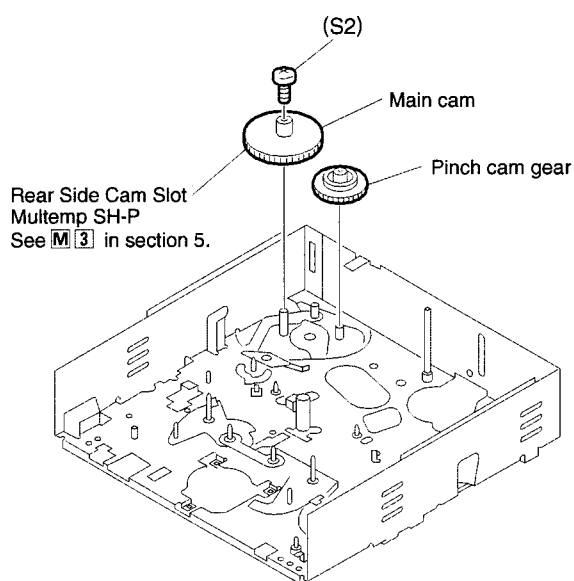


Fig. 2.6.20 (1)

<Disassembly>

Pinch cam gear:

- 1) Lift the pinch cam gear upward to remove.

Main cam:

- 1) Remove the screw (S2) and remove the main cam.

<Assembly>

- 1) Reverse the disassembly procedure.
- 2) Attach the main cam and pinch cam gear so that their phase relationship is as shown in the figure.

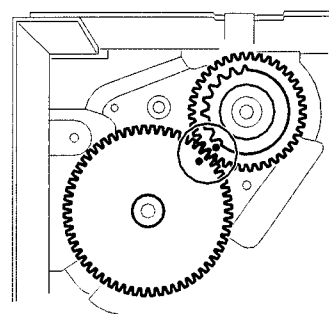
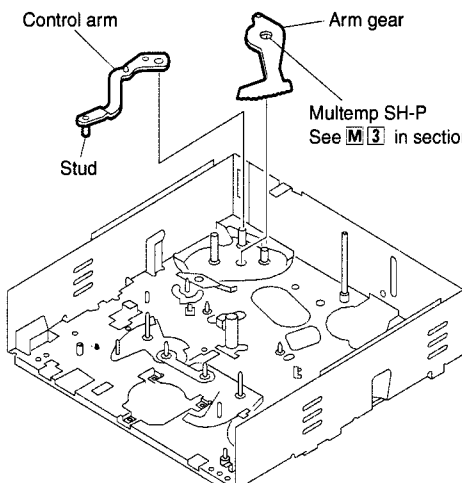
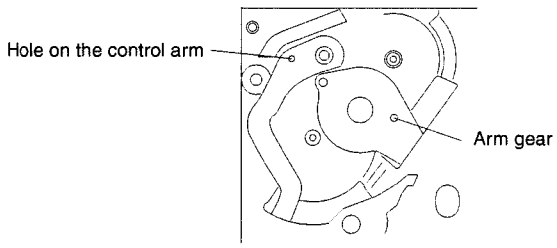
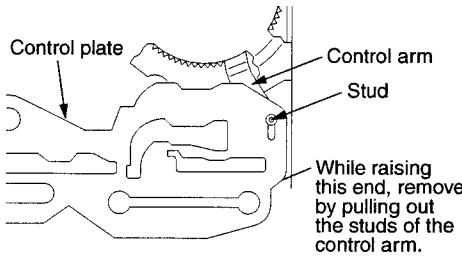
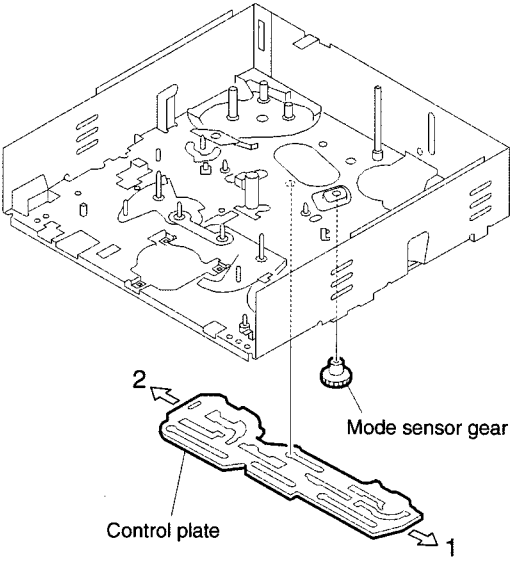
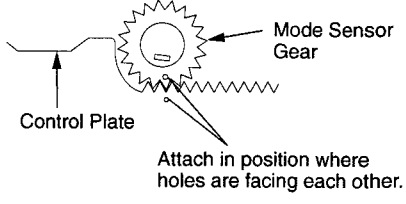


Fig. 2.6.20 (2)

No.	Item	Ref. Illustration	Procedure
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21	36 Arm gear/ 37 Control arm  Fig. 2.6.21 (1)  Fig. 2.6.21 (3)	<Disassembly> Arm gear: 1) Remove the main cam as described in No. 20 and remove the arm gear. Control arm: 1) Place the main deck upside down. 2) Bend the control plate slightly, disengage the control arm's stud from the groove on the plate and remove the control arm. (Refer to Fig. 2.6.21(2)) <Assembly> 1) Reverse the disassembly procedure. 2) Align the hole on the control arm with that on the main deck. 3) Align the hole on the arm gear with that on the main deck.  Fig. 2.6.21 (2)
22	38 Control plate/ Mode sensor gear  Fig. 2.6.22 (1)	<Disassembly> Control plate: 1) Place the main deck upside down. 2) Slide the control plate in the direction of the arrow 1 to remove. Mode sensor gear: 1) Remove the mode sensor gear as if pulling it out. <Assembly> 1) Attach the control plate. 2) Slide the control plate in the direction of the arrow 2. 3) Attach the mode sensor gear so that the hole on it is aligned with that on the control plate.  Fig. 2.6.22 (2)

No.	Item	Ref. Illustration	Procedure
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23 Leaf plate

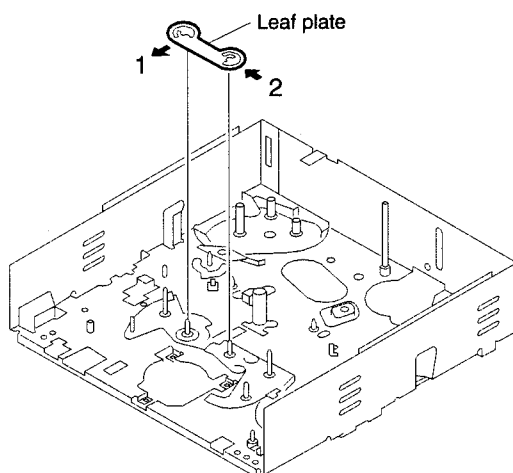


Fig. 2.6.23

<Disassembly>

- 1) Push the supply side of the leaf plate in the direction of arrow 1 to release the lock.
- 2) Push the take-up side of the leaf plate in the direction of arrow 2 to release the lock. Now the leaf plate can be removed.

<Assembly>

- 1) Reverse the disassembly procedure.

Note:

Be careful not to deform the leaf plate during removing or attaching.

24 ④1 Supply reel plate/ ④2 Take-up reel plate

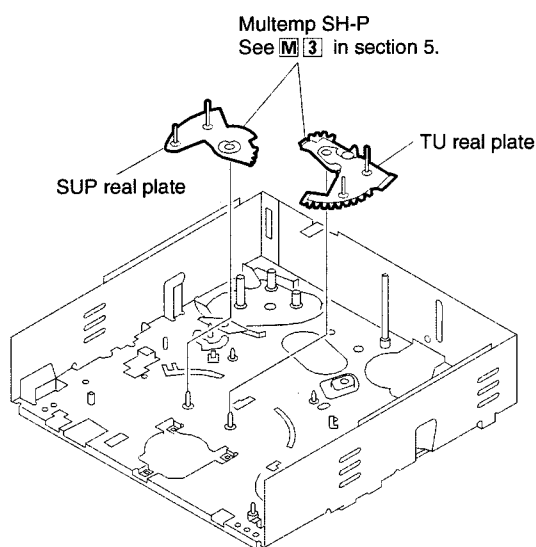


Fig. 2.6.24 (1)

<Disassembly>

Supply reel plate:

- 1) Slide the reel change plate toward the mini-cassette position. (Stop sliding before it is locked completely.) (See Fig. 2.6.6 (2))
- 2) Lift the right side of the supply reel plate (gear side) and turn it slightly to remove.

Take-up reel plate:

- 1) Lift the left side of the take-up reel plate and turn it slightly to remove.

<Assembly>

- 1) Reverse the disassembly procedure.

Notes:

Take-up reel plate attaching position

Attach the take-up reel plate so that the gear cogs on its inner right side are meshed with those on the left end of the reel plate drive gear.

Supply reel plate attaching position

Attach the supply reel plate so that the gear cogs on its inner right side are meshed with those on the left end of the supply reel plate.

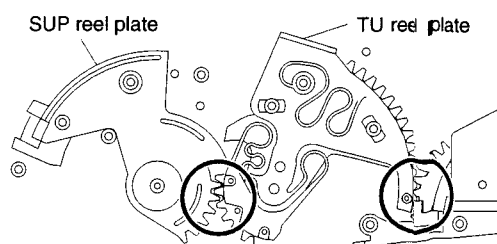


Fig. 2.6.24 (2)

No.	Item	Ref. Illustration	Procedure
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25 ④ FPC1 assembly

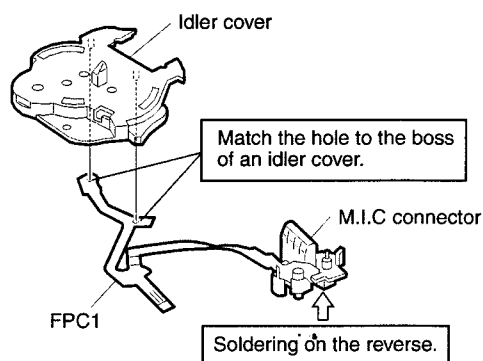


Fig. 2.6.25

<Disassembly>

- 1) Remove the M.I.C connector and idler arm assembly as described in section 2.6.7.
- 2) Remove solder from the M.I.C connector (6 positions).
- 3) Remove the FPC1 assembly by performing the same operation as peeling adhesive tape off for the idler cover section.

<Assembly>

- 1) Reverse the disassembly procedure.

Note:

Do not reuse the removed FPC1 assembly.

26 FPC2 assembly/ FPC3 assembly

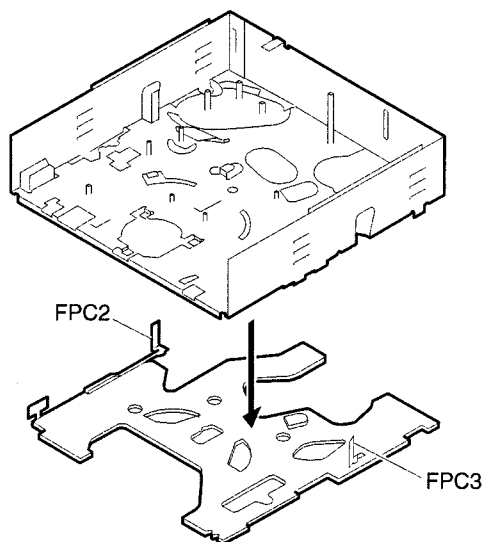


Fig. 2.6.26 (1)

<Disassembly>

FPC2 assembly:

- 1) Remove solder from CN126 on the mechanism board.
- 2) Remove the FPC2 assembly as if peeling adhesive tape off.

FPC3 assembly:

- 1) Remove solder from CN127 on the mechanism board.
- 2) Remove the FPC3 assembly as if peeling adhesive tape off.

<Assembly>

- 1) Reverse the disassembly procedure.

Note:

Do not reuse the removed FPC1 and FPC2 assemblies.

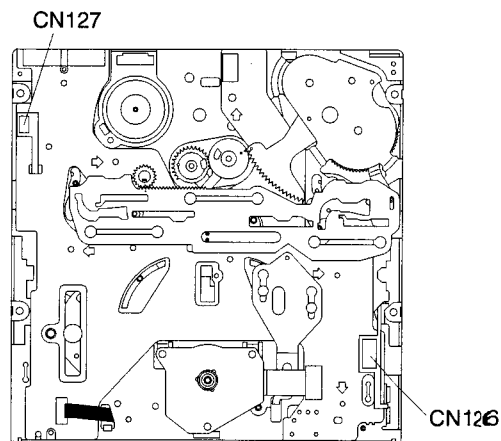


Fig. 2.6.26 (2)

No.	Item	Ref. Illustration	Procedure
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27 **Cassette LED/ LED holder/ MECHA board assembly**

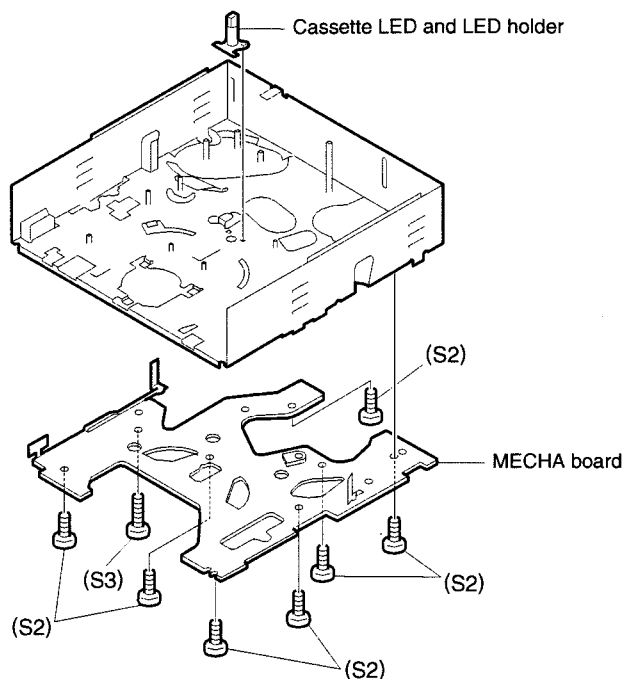


Fig. 2.6.27 (1)

<Disassembly>

Cassette LED:

- 1) Remove solder from LD1 on the mechanism board and remove the cassette LED.

LED holder:

- 1) While pushing the three claws locking the LED holder, remove it.

MECHA board assembly:

- 1) Remove the seven screws (S2) and a screw (S3), then remove the MECHA board assembly.

<Assembly>

- 1) Reverse the disassembly procedure.
- 2) Tighten the eight screws of the mechanism board assembly in the order shown in the illustration.

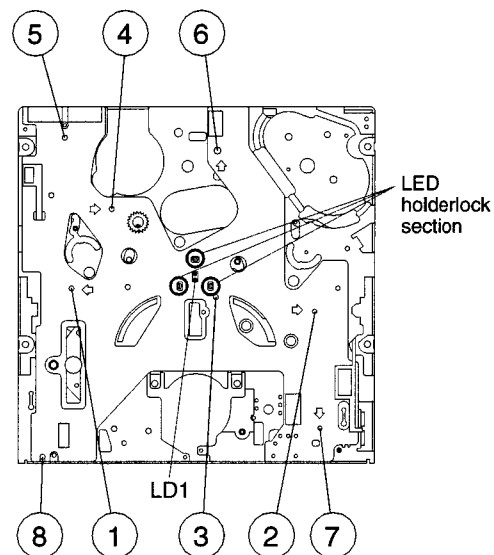


Fig. 2.6.27 (2) — Mechanism unit bottom side —

Note:

Make sure the three claws locking of the LCD holder does not loosen.

No.	Item	Ref. Illustration	Procedure
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2.7 GUIDE ROLLER REPLACEMENT METHOD

Since the SUP/TU tension arm assembly, sub deck assembly (ENT, G, roller section), and E.G.R. arm, have all undergone perpendicularity management after being assembled respectively, assembly replacement of these is not possible.

For maintenance, only the guide roller can be replaced.

1 ① Guide roller replacement procedure for SUP/TU tension arm assembly and ENT.G. roller/E.G. roller arm assembly

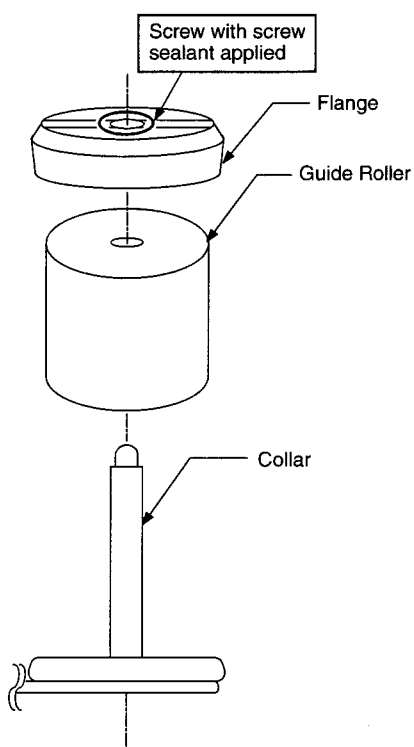


Fig. 2.7.1

<Removing>

- 1) Remove the flange on the upper part of the guide roller as you would remove a screw.
- 2) Pull the guide roller upward and remove it.
- 3) Pull the collar upward and remove it.

<Installing>

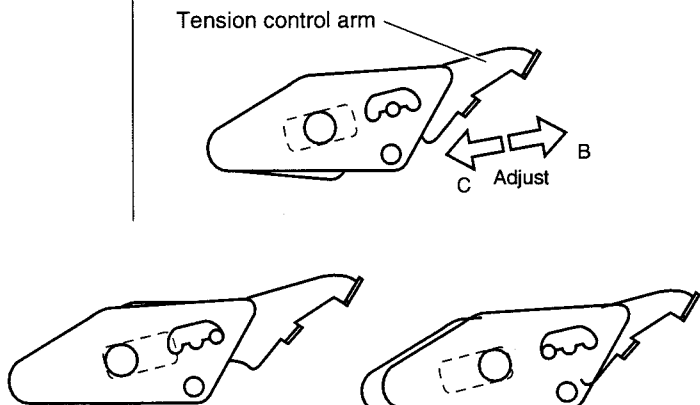
- 1) Proceed in the reverse order as when removing.
- 2) When fixing the flange in place, first tighten by hand until it stops, then tighten further using a securing torque of 0.04 N/m (0.4 kgf/cm).
- 3) After fixing in place, apply screw sealant to the screw on the upper end of the flange.

Note:

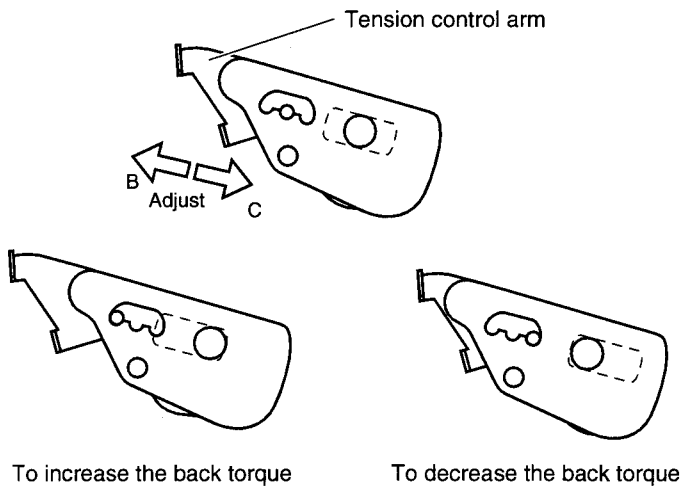
When applying additional tightening force, avoid excessive force that may cause distortion of the arm section.

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (Ⓢ) Adjustment level (☆)	Adjustment procedure
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2.8 TORQUE ADJUSTMENT

1	Supply back torque adjustment	Cassette torque meter YTU94150A	Play	◎ Supply side reading of cassette torque meter ☆ $6.5^{+1.0}_{-0.5} \times 10^{-4} \text{ N}\cdot\text{m}$	1) Insert the torque cassette meter YTU94150A and press the [PLAY] button. 2) Ensure that the SUP back torque value is within the specified range. (If the reading varies, read the center value.) 3) If the reading is out of specification, eject the cassette and adjust by moving the tension control arm. • To increase the torque → Move in direction B • To decrease the torque → Move in direction C. 4) Perform steps 1) and 2) above again and ensure that the SUP back torque value is within the specified range. If it is out of specification, check the <Supply tension band position adjustment> in 2.6.8 above.
 Tension control arm Adjust To increase the torque To decrease the torque					
2	Take-up wind torque adjustment	Cassette torque meter YTU94150A	PLAY, Adjustment menu No. 119	◎ Take-up side reading of cassette torque meter ☆ $11.5^{+1.0}_{-0.5} \times 10^{-4} \text{ N}\cdot\text{m}$	1) Select adjustment menu [119. FWD TORQUE]. (For the adjustment menu, see 3.3, "Adjustment menu".) 2) Insert the torque cassette meter YTU94150A and press the [PLAY] button. 3) Adjust the TU wind torque so that it is within the specified range. • Press [SHUTTER] dial to enter the adjustment mode. • To increase the torque → Rotate [SHUTTER] dial to the clockwise. • To decrease the torque → Rotate [SHUTTER] dial to the counter-clockwise. 4) After adjustment, press [SHUTTER] dial to store the adjustment data.

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⊕) Adjustment level (☆)	Adjustment procedure
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3	Take-up back torque adjustment	Cassette torque meter KLJ0312	REV x 1	◎ Take-up side reading of cassette torque meter ☆ $6.5_{-0.5}^{+1.0} \times 10^{-4} \text{ N}\cdot\text{m}$	1) Insert the torque cassette meter KLJ0312 and enter REV x1 mode. 2) Ensure that the TU back torque value is within the specified range. (If the reading varies, read the center value.) 3) If the reading is out of specification, eject the cassette and adjust by moving the tension control arm. • To increase the torque → Move in direction B • To decrease the torque → Move in direction C. 4) Perform steps 1) and 2) above again and ensure that the TU back torque value is within the specified range. If it is out of specification, check the <Take-up tension band position adjustment> in 2.6.9 above.
					
4	SUP wind torque CHECK	Cassette torque meter KLJ0312	REV x 1	◎ Take-up side reading of cassette torque meter ☆ $11.5_{-1.0}^{+1.5} \times 10^{-4} \text{ N}\cdot\text{m}$	1) Insert the torque cassette meter KLJ0312 and enter REV x1 mode. 2) Ensure that the SUP wind torque is within the specified range. If it is out of specification, check the assembly condition of the reel drive parts.

2.9 INTERCHANGEABILITY ADJUSTMENT

2.9.1 Interchangeability adjustment flow chart

Fig. 2-8-1 shows the flow chart of compatibility adjustment.

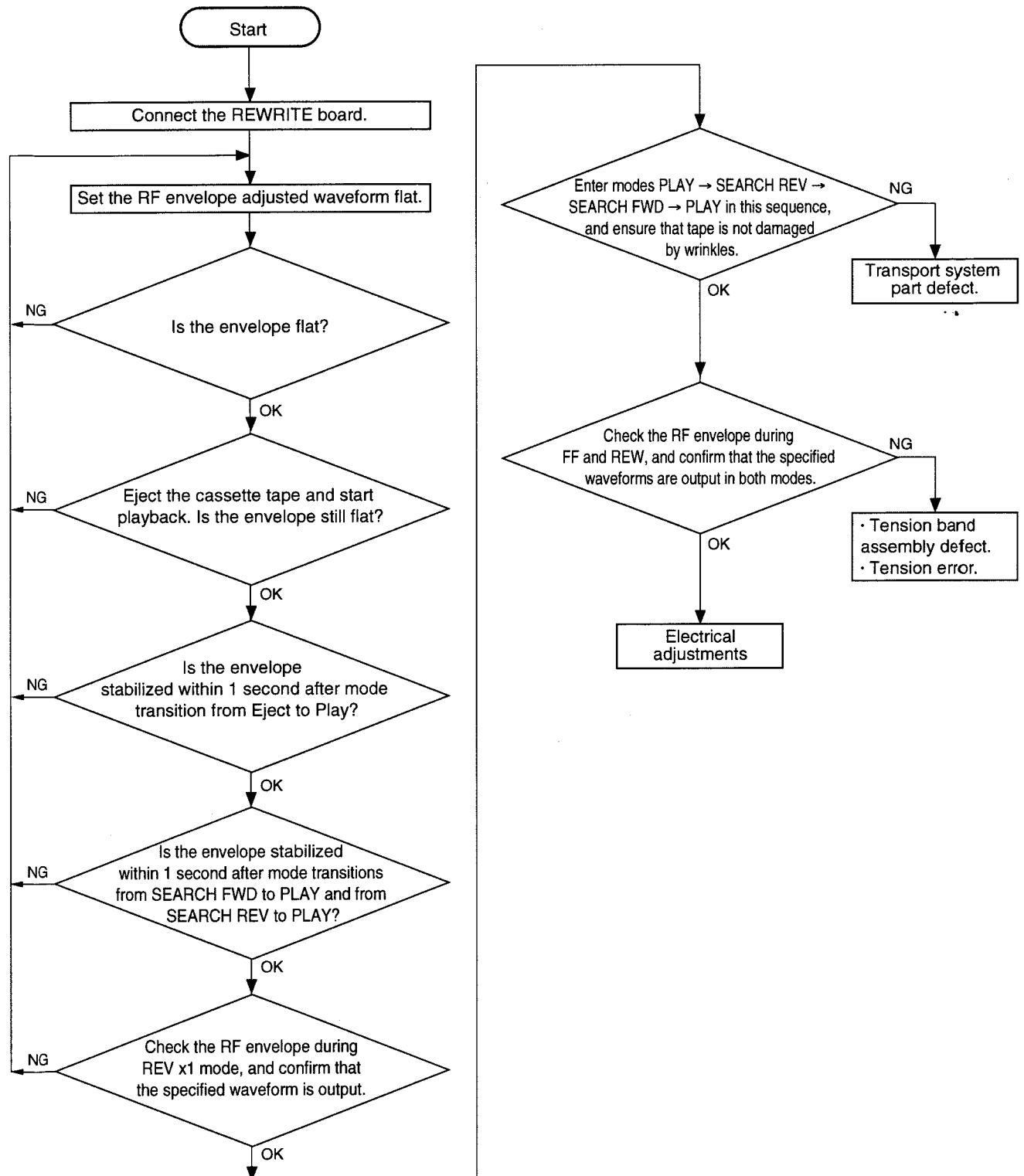


Fig. 2-9-1

2.9.2 Tape Transport Restriction

The unit uses only the SUP guide roller and TU guide roller to restrict the tape transport. The tape is free (no restriction) from other parts.

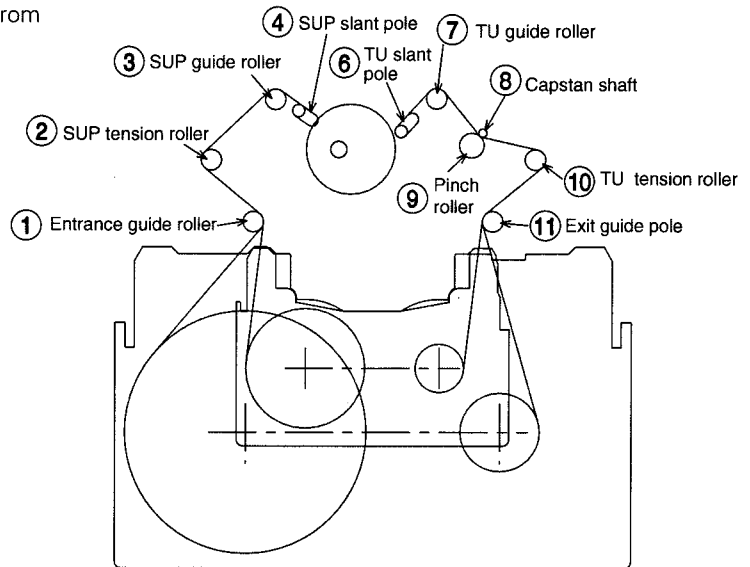


Fig. 2.9.2

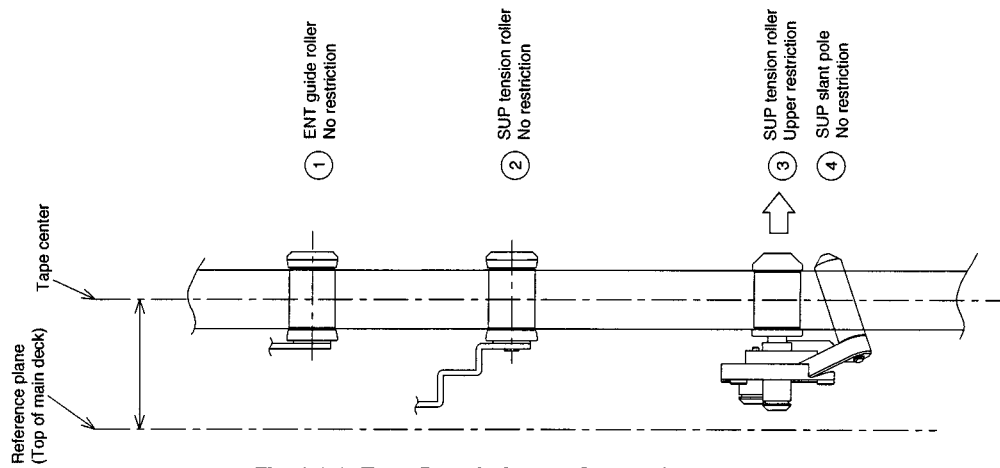


Fig. 2.9.3 Tape Restriction on Supply Side

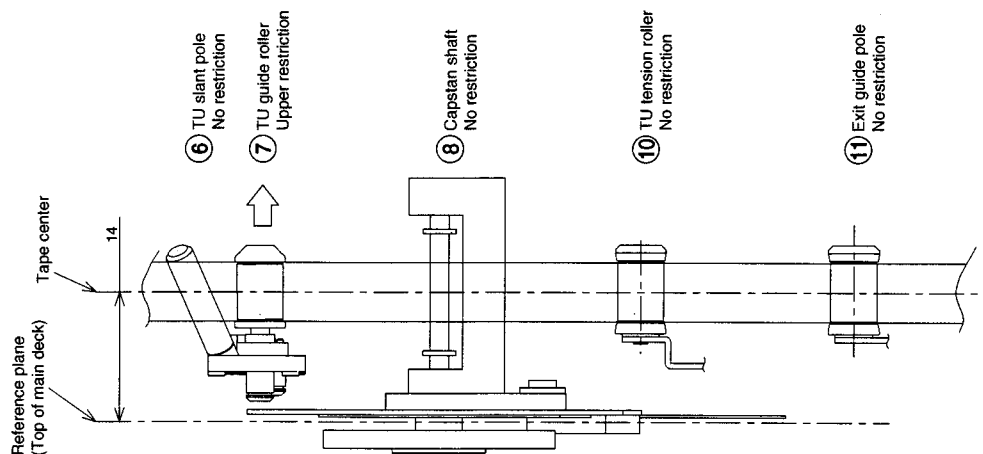


Fig. 2.9.4 Tape Restriction on Take-up Side

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (⊙) Adjustment parts (①) Adjustment level (☆)	Adjustment procedure
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2.9.3 Interchangeability adjustment

1	Preparation				(1) Connect a REWRITE board to the CN801 on the DBCP board. Refer to section 3 for more details. (Fig. 3.4 REWRITE board connection method) Note: Be sure to clean the tape transport parts and play a cleaning tape before proceeding to the compatibility adjustment.
2	RF envelope adjustment	• Oscilloscope, alignment tape MC-1(NTSC) MC-2(PAL) Color bar portion	Play	⊙ TP9 ENV OUT [REWRITE board] ⊙ TP5 HID [REWRITE board] ① Supply guide roller ① Take-up guide roller ☆ Make the wave-forms flat. The drop level should be less than 3 dB with both SUP and TU levels. ☆ Flatness variation should be less than 2 dB.	(1) Play alignment tape color bar portion. (2) Observe the measuring points and adjust the supply guide roller and take-up guide roller so that the RF envelope is flat. (3) Set the mode to EJECT, then set to the PLAY mode and ensure that the RF envelope is flat.

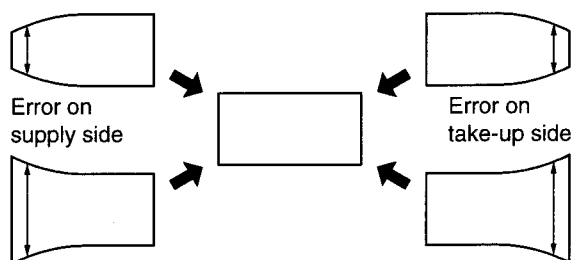


Fig. 2.9.5

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (⊙) Adjustment parts (⊕) Adjustment level (☆)	Adjustment procedure
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3	Waveform rise check	Oscilloscope, alignment tape MC-1(NTSC) MC-2(PAL) Color bar portion	Eject → Play Search FWD → Play Search REV → Play	⊙ ENV OUT [REWRITE board] ⊙ HID [REWRITE board] ☆ The envelope waveform should be restored within 1 sec.	(1) Switch the mode from Eject → Play and ensure that the envelope is stabilized in less than 1 sec. (2) Switch the mode from Search FWD → Play and from Search REV → Play, and ensure that the envelope is stabilized in less than 1 sec. in both cases. (3) If the envelope does not stabilize in the specified period, fine-adjust the supply/take-up guide rollers as far as the envelope waveform specification is met, then restart checking from the above procedure (1) again.
4	Damage check	Self-recorded/played tape 60 ME 270ME	Play ↓ Search REV ↓ Search FWD ↓ Play	⊙ ENV OUT [REWRITE board] ⊙ HID [REWRITE board] ☆ The tape should not be damaged by wrinkle.	(1) Transport the self-recorded/played Mini cassette tape from the beginning by changing modes in order of Play → Search REV → Search FWD → Play, and ensure that wrinkles due to strong restriction by the guide rollers and guide pole are not produced on tape. (2) Perform the same check at the section near the end of tape. (3) Make sure that no tape damage occurs when a tape is being loaded, unloaded or ejected. (4) Perform the same procedure (1) — (3) with standard cassette.
5	Envelope check during FF/REW	Oscilloscope, alignment tape MC-1(NTSC) MC-2(PAL) Color bar portion	FF REW	⊙ ENV OUT [REWRITE board] ⊙ HID [REWRITE board] ☆ A > 55μsec. ☆ B ≥ T/3	This checking should be done after completing the switching point adjustment. (1) Insert the alignment tape and enter Stop mode. (2) Enter FF mode. (3) Ensure that the envelope output is present at 55 μs before the HID switching timing. (4) Check the take-up side of the envelope to see that the MAX output duration is more than 1/3 the HID duration. (5) Enter REW mode and check the same items as (3) and (4) above. (6) If the envelope is out of specification, check the tension band and main brake assembly and replace as needed. Confirm the playback switching point.

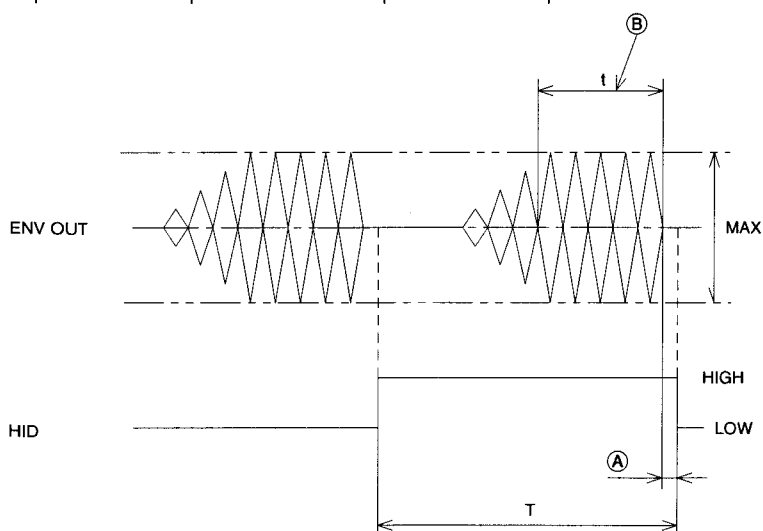


Fig. 2.9.6

SECTION 3 ELECTRICAL ADJUSTMENTS

3.1 FUNCTIONS REQUIRED FOR ADJUSTMENTS, SETUP

3.1.1 General instruments necessary for adjustment

Instrument	Condition	Instrument	Condition
Oscilloscope	Calibrated instrument with a measuring bandwidth of 100 MHz or more.	Frequency counter	Instrument calibrated for 8 digits or more. Stability of 0.1 ppm or 1×10^{-7} or better is required at 0 to 40°C.
Vectorscope	Calibrated instrument	Monitor TV	Color video monitor with a 75Ω video input.
Audio tester	Calibrated instrument		

3.1.2 Special implements required for adjustment

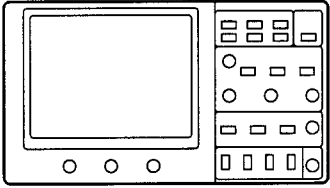
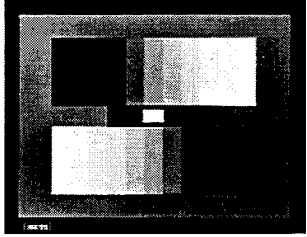
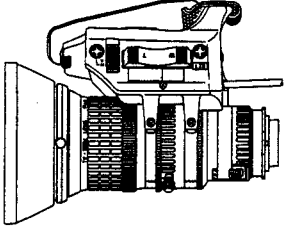
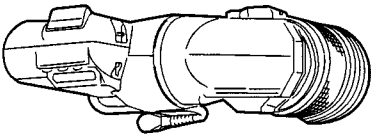
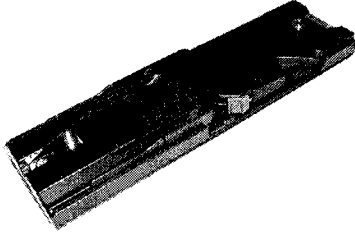
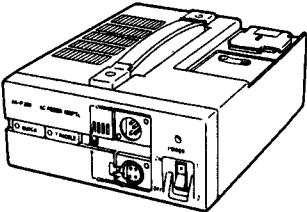
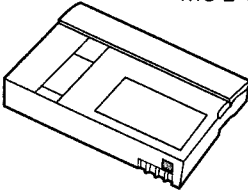
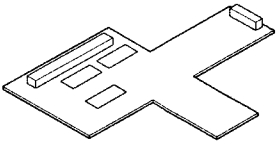
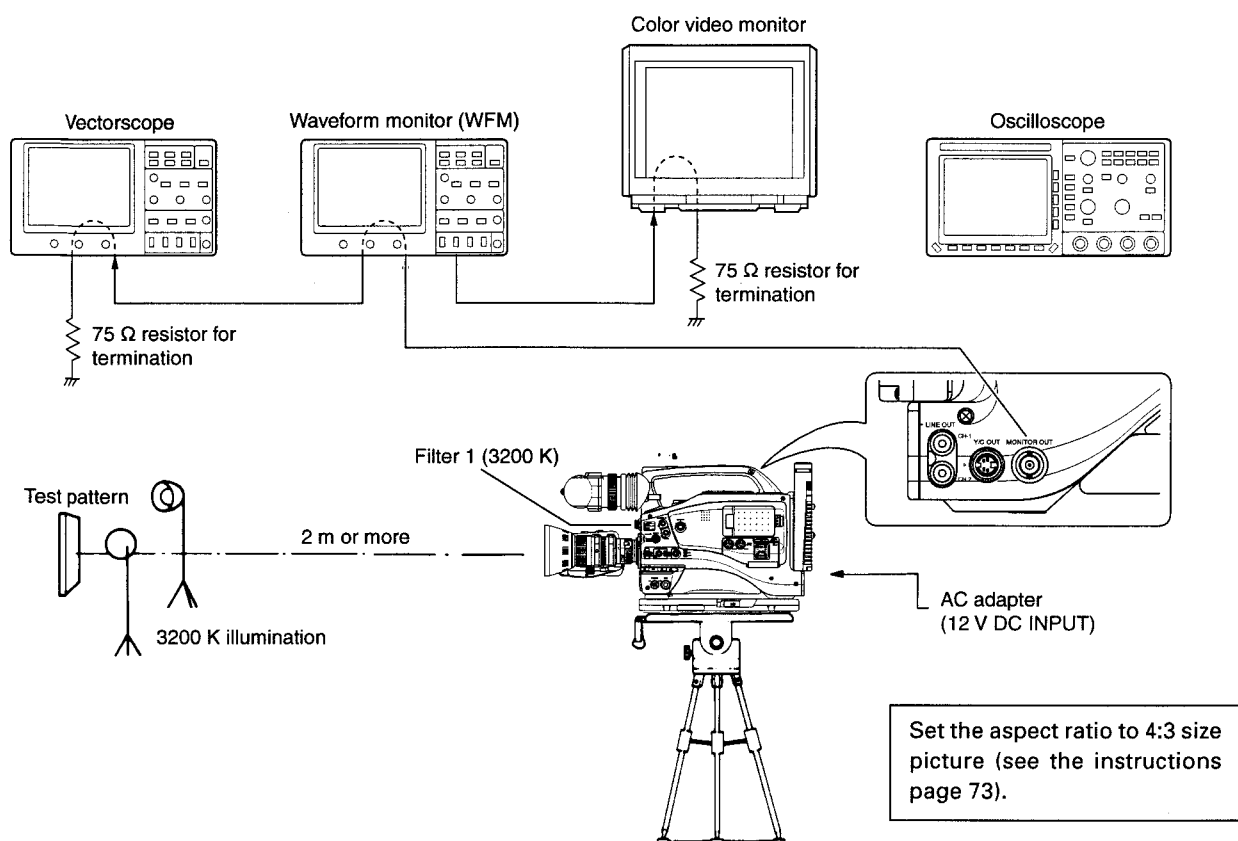
1	Waveform monitor (WFM)	2	Gray scale chart (Part No.:GS2L)	3	Lens S14 x 7.3B12 or equivalent
					
4	Viewfinder VF-P115B or equivalent	5	Tripod base Accessory (Part No. : SCV3021-001)	6	Power supply unit AA-P250 or equivalent
					
7	Monitor TV	8	Alignment tape MC-1 : NTSC MC-2 : PAL	9	REWRITE board CK453800B
					

Fig. 3-1-1 Special implements required for adjustment

3.2 STANDARD SETUP



Adjustment items

For Camera adjustment

No.	Item name	Indication	Adjustment value	Remarks
0	FH adjustment	FH	0 ~ 255	
1	ENCODER adjustment	ENCODER	0 ~ 255	
2	CHROMA adjustment	CHROMA LEVEL	0 ~ 255	
3	SETUP OFF adjustment	SETUP OFF	50 ~ 255	
4	BLACK (B) adjustment	FPGA BLACK (B)	0 ~ 20	
5	BLACK (R) adjustment	FPGA BLACK (R)	0 ~ 20	
6	MASTER BLACK adjustment	MASTER BLACK	0 ~ 20	
7	IN GAIN (Gch) adjustment	IN GAIN (G)	0 ~ 255	
8	IN GAIN (Rch) adjustment	IN GAIN (R)	0 ~ 255	
9	IN GAIN (Bch) adjustment	IN GAIN (B)	0 ~ 255	
10	FLARE (R) adjustment	FPGA FLARE (R)	0 ~ 20	
11	FLARE (B) adjustment	FPGA FLARE (B)	0 ~ 20	
12	MASTER FLARE adjustment	MASTER FLARE	0 ~ 50	
13	LOLUX BLACK (B) adjustment	LOLUX BLACK (B)	0 ~ 20	
14	LOLUX BLACK (R) adjustment	LOLUX BLACK (R)	0 ~ 20	
15	LOLUX MASTER BLACK adjustment	LOLUX MASTER BLACK	0 ~ 20	
16	AFE OUT BLACK (B) adjustment	AFE OUT BLACK (B)	0 ~ 20	
17	AFE OUT BLACK (R) adjustment	AFE OUT BLACK (R)	0 ~ 20	
18	AFE MASTER BLACK adjustment	AFE MASTER BLACK	0 ~ 20	

For AUDIO adjustment

No.	Item name	Indication	Adjustment value	Remarks
20	AUDIO LEVEL (CH1) adjustment	AUDIO LEVEL (CH1)	0 ~ 255	
21	AUDIO LEVEL (CH2) adjustment	AUDIO LEVEL (CH2)	0 ~ 255	

For LCD adjustment

No.	Item name	Indication	Adjustment value	Remarks
40	SUB-BRIGHT R adjustment	SUB-BRIGHT R	0x1b ~ 0x6b	Unnecessary
41	SUB-BRIGHT B adjustment	SUB-BRIGHT B	0x1b ~ 0x6b	Unnecessary
42	CONTRAST adjustment	CONTRAST	0x64 ~ 0xa0	Unnecessary
43	SUB-CONTRAST R adjustment	SUB-CONTRAST R	0x0a ~ 0x5a	Unnecessary
44	SUB-CONTRAST B adjustment	SUB-CONTRAST B	0x28 ~ 0x78	Unnecessary
45	γ -1 adjustment	GAMMA-1	0x00 ~ 0x50	Unnecessary
46	γ -2 adjustment	GAMMA-2	0x00 ~ 0x50	Unnecessary
47	PSIG BRIGHT adjustment	PSIG BRIGHT	0x28 ~ 0x78	
48	COMMON DC adjustment	COMMON DC	0x1b ~ 0x6b	
49	HUE adjustment	HUE	0x23 ~ 0x5f	Unnecessary
50	VCO FINE adjustment	VCO FINE	0x96 ~ 0xe6	
51	BLACK LIMITER adjustment	BLACK LIMITER	0x00 ~ 0x3f	Unnecessary
52	VCO COARSE adjustment	VCO COARSE	0x01 ~ 0x07	Unnecessary
53	H-POSITION adjustment	H-POSITION	0x02 ~ 0x1f	

For DVC unit adjustment

No.	Item name	Indication	Adjustment value	Remarks
100	SW POINT adjustment	PB SW POINT	00000000 ~ FFFFFFFF	
105	ME REC CURRENT adjustment	ME REC CURRENT	0 ~ 255	
106	ME SP VCO adjustment	ME SP VCO	0000H ~ FFFFH	
110	FS PLL 48kHz adjustment	FS PLL 48kHz	0 ~ 255	
111	FS PLL 44.1kHz adjustment	FS PLL 44.1kHz	0 ~ 255	
112	FS PLL 32kHz adjustment	FS PLL 32kHz	0 ~ 255	
113	27MHz VCO adjustment	27MHz VCO	0 ~ 255	
114	ATF GAIN adjustment	ATF GAIN	0 ~ 255	Unnecessary
115	AGC GAIN adjustment	AGC GAIN	0 ~ 255	Unnecessary
118	BGNEND SENS adjustment	BGNEND SENS	0 ~ 255	Unnecessary
119	FWD TORQUE adjustment	FWD TORQUE	0 ~ 255	See section 2.8 page 2-25
120	REV TORQUE adjustment	REV TORQUE	0 ~ 255	Unnecessary

3.3 ADJUSTMENT MENU

3.3.1 Switches and Functions Used in Adjustments

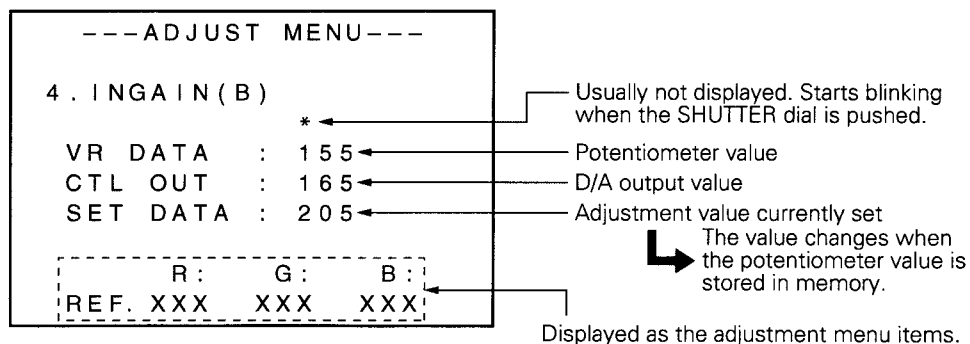
Most of the adjustment items employ microcomputer-controlled adjustments using electric potentiometers. The adjustment data is stored in EEPROM.

The switches used in the adjustments and their functions are as follows.

- STATUS button : Press to start or exit from the adjustment menu.
- EDIT SEARCH +, EDIT SEARCH - : Press to select the adjustment item.
- SHUTTER dial (rotate) : Rotate to adjust the selected item.
- SHUTTER dial button (push in) : Press to start an adjustment and store the adjustment value in memory.

3.3.2 Procedure

- (1) Turn the power ON, while holding the **EDIT SEARCH +** and **EDIT SEARCH -** buttons
- (2) When the power is ON, press the **STATUS** button to display the ADJUST MENU.
- (3) Push the **SHUTTER** dial button so that "*" blinks, and rotate the **SHUTTER** dial to the specified value while observing the designated TP and measuring instrument. (In this mode, **SHUTTER** dial rotate while holding the **MENU** button, then parameter value change quickly.)
- (4) After completing the adjustment, push the **SHUTTER** dial button to delete the "*" and store the adjustment value in memory. (If do not push the **SHUTTER** dial button, adjustment value will not stored.)
- (5) Press the **EDIT SEARCH +** and **EDIT SEARCH -** button to select the next item to adjust.
- (6) Adjust for each item to do same procedure as above (3)(4).
- (7) After completing all adjustments, press the **STATUS** button to exit the ADJUST MENU.
- (8) To return to normal operation mode, turn the power OFF and ON again. (If did not re-start camera power, camera will be still in ADJUST MODE, so if press the **MENU** button then ADJUST **MENU** indicate on the screen and will not indicate normal menu screen.)

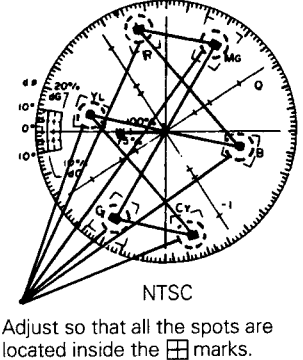


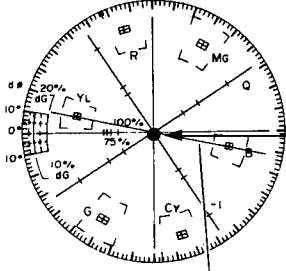
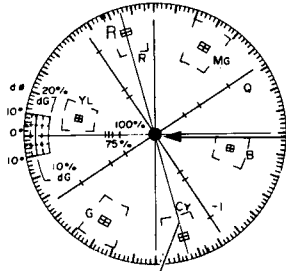
On-screen adjustment menu

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (①) Adjustment level (☆)	Adjustment procedure
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3.4 CAMERA ADJUSTMENTS

3.4.1 Camera adjustments

1	FH adjustment	Frequency counter	ADJUST MENU	◎ TP[FH] Rewrite PWB ① SHUTTER dial ☆ $6,750,000 \pm 10\text{Hz}$	(1) Press the EDIT SEARCH+/- button to select ADJUST MENU No.0, "FH".(Color bar signal will be output automatically) (2) Push the SHUTTER dial button so that "*" blinks, and then rotate the SHUTTER dial to adjust to the specified value.
2	ENCODER adjustment	Vectorscope Oscilloscope	ADJUST MENU	◎ On screen value ① SHUTTER dial ☆ "128" ◎ MONITOR OUT ① SHUTTER dial ☆ All the points of the color bar signal should be within the  marks of the vectorscope.	(1) Press the EDIT SEARCH+/- button to select ADJUST MENU No."1."ENCODER". (2) Make sure to confirm the Onscreen "SET DATA" value should be specified level. (3) Press the EDIT SEARCH+/- button to select ADJUST MENU No.2."CHROMA LEVEL". (4) Rotate the SHUTTER dial to adjust to the specified value.
				◎ MONITOR OUT Burst level ① $0.286 \pm 0.015\text{Vp-p}$	* If did not prepare Vectorscope, use oscilloscope and adjust to the value as Left.
3	SETUP_OFF adjustment	Oscilloscope	ADJUST MENU	◎ MONITOR OUT ① SHUTTER dial ☆ $1.00 \pm 0.03\text{Vp-p}$	

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (⊙) Adjustment parts (①) Adjustment level (☆)	Adjustment procedure
4	BLACK adjustment	Vectorscope Lens cap  B-Y axis Oscilloscope Lens cap  R-Cy axis Oscilloscope Lens cap	ADJUST MENU	⊙ MONITOR OUT ① SHUTTER dial ☆ Position the noise on the B-YL axis at the center of the Vectorscope. ⊙ MONITOR OUT ① SHUTTER dial ☆ Position the noise on the R-Cy axis at the center of the Vectorscope. ⊙ MONITOR OUT ① SHUTTER dial ☆ 0.053 ± 0.007V ⊙ CHROMA signal from Y/C output ☆ Less than 0.03Vp-p	(1) Press the EDIT SEARCH+/- button to select ADJUST MENU No.4."FPGA BLACK (B)". (2) Rotate the SHUTTER dial to adjust to the specified value. (3) Then, Press the EDIT SEARCH+/- button to select ADJUST MENU No.5."FPGA BLACK (R)". (4) Rotate the SHUTTER dial to adjust to the specified value. (5) Then, press the EDIT SEARCH+/- button to select ADJUST MENU No.6."MASTER BLACK". (6) Rotate the SHUTTER dial to adjust black level to the specified value. (7) Check the CHROMA signal (from Y/C output) to confirm that the carrier leakage should be specified level.
5	IN GAIN adjustment	Gray scale chart (just scanned) Vectorscope	ADJUST MENU	⊙ On screen value (Gch Ref) ① Lens Iris ☆ "280 ± 5" ⊙ MONITOR OUT ① SHUTTER dial ☆ Position the noise on the R-Cy axis at the center of the Vectorscope. ⊙ MONITOR OUT ① SHUTTER dial ☆ Position the noise on the B-YL axis at the center of the Vectorscope. ⊙ CHROMA signal from Y/C output ☆ Less than 0.03Vp-p	(1) Press the EDIT SEARCH+/- button to select ADJUST MENU No.7."IN GAIN (G)". (2) Shooting the Gray scale chart, and adjust the lens iris so that the Gch Ref DATA display is specified value. (3) Press the EDIT SEARCH+/- button to select ADJUST MENU No.7."IN GAIN (R)". (4) Rotate the SHUTTER dial to adjust to the specified value. (5) Press the EDIT SEARCH+/- button to select ADJUST MENU No.7."IN GAIN (B)". (6) Rotate the SHUTTER dial to adjust to the specified value. (7) Check the CHROMA signal (from Y/C output) to confirm that the carrier leakage should be specified level.

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (①) Adjustment level (☆)	Adjustment procedure
6	FLARE-2 adjustment	Gray scale char (just scanned) oscilloscope	ADJUST MENU	◎ On screen value ① Lens iris ☆ 528 ± 10 (Gch Ref DATA)	(1) Press the EDIT SEARCH+/- button to select ADJUST MENU No.12. "MASTER FLARE". (2) Rotate the SHUTTER dial to adjust the data value set to "10". (3) Then, adjust the Lens iris so that the G ch Ref DATA display is specified value.
7	FLARE-2 adjustment	Oscilloscope Gray scale chart (just scanned)	ADJUST MENU	◎ MONITOR OUT ① SHUTTER dial ☆ Minimize window black carrier leakage. ◎ MONITOR OUT ① SHUTTER dial ☆ Minimize window black carrier leakage. ◎ On screen value (Gch Ref) ① Lens iris ☆ 280 ± 5 ◎ CHROMA signal from Y/C output ☆ 0.03Vp-p	(1) Press the EDIT SEARCH+/- button to select ADJUST MENU No.10. "FPGA FLARE (R)". (2) Rotate the SHUTTER dial to adjust to minimize the window black carrier leak. (3) Press the EDIT SEARCH+/- button to select ADJUST MENU No.10. "FPGA FLARE (B)". (4) Rotate the SHUTTER dial to adjust to minimize the window black carrier leak. (5) Adjust the lens iris so that the G ch Ref DATA display is specified value. (6) Adjust the lens iris so that the white signal level of the Gray scale chart is 100%. (7) Then, Check the CHROMA signal (from Y/C output) to confirm that the carrier leakage should be specified level.
8	BLACK Adjustment	Vectorscope Gray scale chart	ADJUST MENU	◎ MONITOR OUT ① Lens iris ☆ 20% ~ 40% signal level ◎ MONITOR OUT ① SHUTTER dial ☆ Position the noise on the B-YL axis at the center of the Vectorscope ◎ MONITOR OUT ① SHUTTER dial ☆ Position the noise on the R-CY axis at the center of the Vectorscope.	(1) Press the EDIT SEARCH+/- button to select ADJUST MENU No.13. "LOLUX BLACK (B)". (2) Adjust the lens iris so that the video signal level is specified level. (3) Rotate the SHUTTER dial to adjust to the specified value. (4) Press the EDIT SEARCH+/- button to select ADJUST MENU No.14. "LOLUX BLACK (R)". (5) Rotate the SHUTTER dial to adjust to the specified value.

No.	Item	Measuring instruments & input signals	Mode	Measuring point (◎) Adjustment parts (①) Adjustment level (☆)	Adjustment procedure
9	LOLUX MASTER BLACK adjustment	Oscilloscope Gray scale chart	ADJUST MENU	◎ On screen value ① SHUTTER dial ☆ "10" ☆ Pedestal level or more	(1) Press the EDIT SEARCH+/- button to select ADJUST MENU No.15."LOLUX MASTER BLACK". (2) Rotate the SHUTTER dial to adjust to the specified value. (3) Confirm the first step signal level of the Gray scale chart should be pedestal level or more. (4) If the signal level would be under pedestal level, when rotate the SHUTTER dial to adjust it to the specified value.

3.4.2 AUDIO adjustment

Audio adjustments are required to input the test signal from LINE input.
All switches and VR's should be set the position as below table.

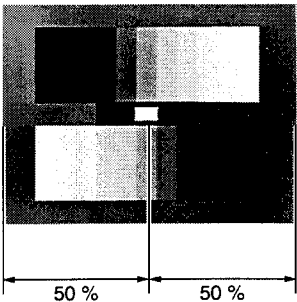
AUDIO INPUT	: LINE	CH-1 FRONT VR (MENU)	: DISABLE
AUDIO INPUT	: REAR	AUDIO MODE (MENU)	: 48k
AUDIO SELECT	: MANUAL	AUDIO LEVEL CH-1 (FRONT)	: MAX
WIND CUT (MENU)	: OFF	AUDIO REF.LEVEL (MENU)	: -20dB

1	INPUT LEVEL adjustment	Audio tester 1KHz/+4dBs	Camera mode	◎ TP13 (CH-1) [ALS PWB] TP14(CH-2) [ALS PWB] ① VR1 (CH-1) VR2 (CH-2) ☆ -22±0.5dBs	(1) Input the test signal (1KHz /+4dBs) to the LINE input, adjust the adjustment point to the specified level.
2	EE output level adjustment	Audio tester 1KHz/+4dBs	Camera mode	◎ LINE OUT ① VR501 (CH-1) VR503 (CH-2) ☆ -8±0.5dBs	(1) This adjustment item should be do after complete the INPUT LEVEL adjustment. (2) Input the test signal (1KHz /+4dBs) to the LINE input, adjust the adjustment point to the specified level.
3	Playback output level adjustment	Audio tester 1KHz/+4dBs	VTR mode (PLAY) Standard tape (MC-1 or MC-2)	◎ LINE OUT ① VR502 (CH-1) VR504 (CH-2) ☆ -8±0.5dBs	(1) Play back test tape which is recorded standard test signal, then adjust the adjustment point to specified level.
4	Audio level meter adjustment	1KHz/+4dBs	Camera mode LCD should be Spread indication	◎ LCD MONITOR ① VR506 (CH-1) VR507 (CH-2) ☆ CTL DATA should be "275±1"	(1) This adjustment item should be do after complete the INPUT LEVEL adjustment. (2) Input the test signal (1KHz /+4dBs) to the LINE input, adjust the adjustment point to the specified level.

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⌚) Adjustment level (☆)	Adjustment procedure
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3.4.3 MONITOR LCD adjustment

For the MONITOR LCD adjustment, the following adjustment are required only. Other adjustment items should be default value.

1	COMMON DC adjustment		ADJUST MENU	◎ MONITOR LCD ⌚ SHUTTER dial ☆ Minimize the flicker	(1) Press the EDIT SEARCH+/- button to select ADJUST MENU No.48, "COMMON DC". (2) Set the MONITOR LCD to field invert mode, rotate the SHUTTER dial to adjust to the specified level.
2	VCO adjustment		ADJUST MENU	◎ MONITOR LCD ⌚ SHUTTER dial ☆ Most stable point for monitor screen	(1) Press the EDIT SEARCH+/- button to select ADJUST MENU No.50, "VCO FINE". (2) Rotate the SHUTTER dial to adjust to the specified level.
3	H-POSITION adjustment	Gray scale chart 	ADJUST MENU	◎ MONITOR LCD ⌚ SHUTTER dial ☆ Screen centering	(1) Press the EDIT SEARCH+/- button to select ADJUST MENU No.53, "H POSITION". (2) Shooting the Grey scale chart and rotate the SHUTTER dial to adjust the white part in the middle of Gray scale so that it is at the center of the screen.

3.4.4 DVC UNIT ADJUSTMENTS

Preparation: Connect the Rewrite board (CK453800B) to CN801 on the DBCD board. Connect it in the orientation shown in Fig. 3.4, so that the test point surface (component mounting surface) faces upward.

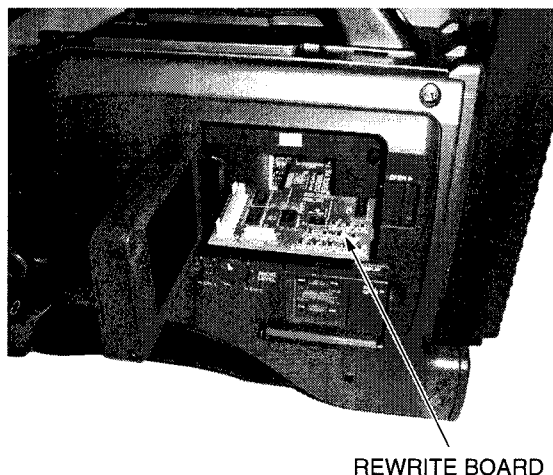
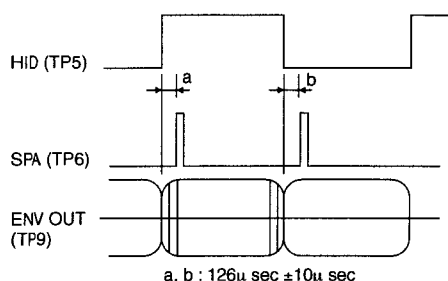


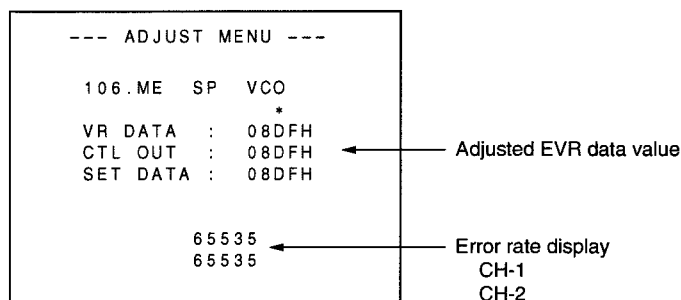
Fig. 3.4 Rewrite board connection method

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (Ⓢ) Adjustment level (☆)	Adjustment procedure
1	PB switching point adjustment	Alignment tape, NTSC : MC-1, PAL : MC-2 color bar recorded section	•PLAY •ADJUST MENU, 100. PB SW POINT	◎ TP6 (SPA) ◎ TP9 (ENV OUT) TRIG: TP5 (HID) GND: TP1 (GND) [Rewrite board] Ⓢ Auto adjustment ☆ a, b = 126 μ sec ± 10 μ sec	(1) Press the EDIT SEARCH +/- button to select ADJUST MENU No. 100, "PB SW POINT". (2) Play the alignment tape. Ensure that the compatibility adjustment has been performed and the FM waveform at TP9 (ENV OUT) is flat and stable. (3) Press the SHUTTER dial to cause the * marking to blink. The PB switching point will be adjusted automatically.

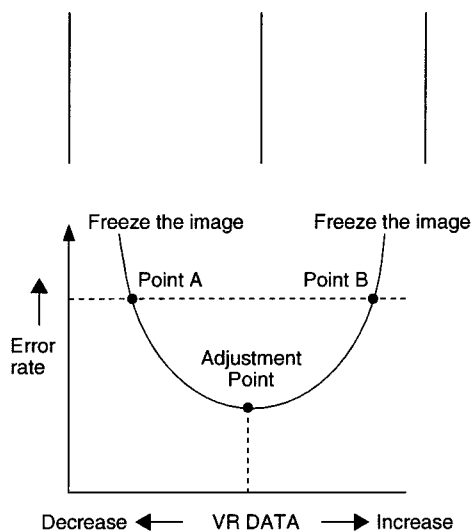


No.	Item	Measuring instruments & Input signals	Mode	Measuring point (⊙) Adjustment parts (Ⓜ) Adjustment level (☆)	Adjustment procedure
					(4) Measure TP6 (SPA) by triggering TP5 (HID) and confirm that the values a and b are within the specified ranges. (5) Rotate the SHUTTER dial to display the adjustment data in the "DATA:" field. (The DATA value should not be 00000000 or FFFFFFFF.) (6) Press the [SET] button so that the * marking stops blinking. Now the adjustment is complete. NOTE: Make sure that the data value is displayed before pressing the SHUTTER dial. If this adjustment is completed before the data value is displayed the adjustment value will not be put into the memory.
		<pre> --- ADJUST MENU --- 100.PB SW POINT VR DATA : ----* CTL DATA : 120 SET DATA : 120 DATA : 00000000 </pre> ← Rotate the SHUTTER dial to display data. After displaying the data, press the SHUTTER dial to complete the adjustment.			
2	ME recording current adjustment		• REC • ADJUST MENU, 105. ME REC CURRENT	⊙ MONITOR LCD Ⓜ SHUTTER dial ☆ SET DATA = 115	(1) Press the EDIT SEARCH +/- button to select ADJUST MENU No. 105, "ME REC CURRENT" and enter REC mode. (2) Check the set data so that the value is "115" (Recording current is approx. 360 mVp-p). If not, adjust the value to "115" (3) Press the SHUTTER dial to store the adjustment data.
		<pre> --- ADJUST MENU --- 105.ME REC CURRENT VR DATA : 115 CTL OUT : 115 SET DATA : 115 CH1 65535 CH2 65535 </pre> Recording the current adjustment			

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (⊙) Adjustment parts (⊕) Adjustment level (☆)	Adjustment procedure
3	ME SP VCO offset adjustment (Error rate adjustment)	Recording tape (brand-new tape)	• Self-REC/PLAY • ADJUST MENU, 106. ME SP VCO	⊙ MONITOR LCD ⊕ SHUTTER dial ☆ Minimum error rate, which should be = 498 (per CH). (Viterbi : OFF)	(Notes) • Be sure to use a brand-new tape for the ME SP VCO offset adjustment. • Be sure to clean the tape with a head cleaning tape before adjustment. • The error rate should be measured with the Viterbi OFF. The Viterbi is switched OFF automatically when the adjustment mode is entered. • The error rate value is displayed in decimal form. (1) Record a moving image in advance on the recording tape. (2) Press the EDIT SEARCH +/- button select to ADJUST MENU No. 106, "ME SP VCO". (3) Play the recorded tape, rotate the SHUTTER dial to minimize the adjustment EVR data and freeze the image. (4) Increase the EVR data gradually until the block noise disappears. The current value is the adjustment value "A". (5) Play the recorded tape and rotate the SHUTTER dial in order to maximize the EVR data and freeze the image. (6) Decrease the EVR data gradually until the block noise disappears. The current value is the adjustment value "B". (7) Calculate the intermediate value between the "A" and "B" values. (Since the adjustment values are hex numbers, use a functional computation-capable calculator or the PC calculator provided in Accessories.) $C = (A + B)/2$ Set value "C" as the adjustment value. (8) Play the recorded tape again, ensure that the error rate is no more than the specified value. (9) Press the SHUTTER dial to store the adjustment data.

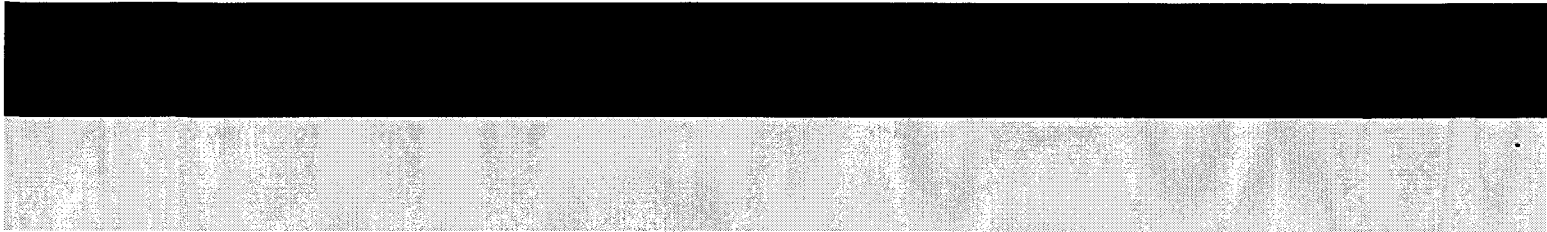


SP VCO Offset Menu



Concept of the adjustment

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⌚) Adjustment level (☆)	Adjustment procedure
4	FS PLL 48 kHz adjustment	No input. Frequency counter	EE ADJUST MENU, 110. FS PLL 48 kHz	◎ TP4 (FS PLL) GND: TP1 (GND) [Rewrite board] ⌚ SHUTTER dial ☆ 12.288 MHz $\pm$ 0.1 MHz	(1) Press the EDIT SEARCH +/- button to select ADJUST MENU No. 110, "FS PLL 48 kHz". (2) Adjust the frequency to the specified level. (3) Press the SHUTTER dial to store the adjustment data.
5	FS PLL 44.1 kHzHz adjustment	No input Frequency counter	EE ADJUST MENU, 111. FS PLL 44.1 kHz	◎ TP4 (FS PLL) GND: TP1 (GND) [Rewrite board] ⌚ SHUTTER dial ☆ 11.2896 MHz $\pm$ 0.1 MHz	(1) Press the EDIT SEARCH +/- button to select ADJUST MENU No. 111, "FS PLL 44.1 kHz". (2) Adjust the frequency to the specified level. (3) Press the SHUTTER dial to store the adjustment data.
6	FS PLL 32 kHz adjustment	No input.	EE ADJUST MENU, 112. FS PLL 32 kHz	◎ None ⌚ SHUTTER dial ☆ Value adjusted in No. 110, "FS PLL 48 kHz" in item 4 above.	(1) Press the EDIT SEARCH +/- button to select ADJUST MENU No. 112, "FS PLL 32 kHz". (2) Adjust to the same value as the FS PLL 48 kHz adjustment value. (Setting range: 0 to 255) (3) Press the SHUTTER dial to store the adjustment data.
7	27 MHz VCO center frequency adjustment	No input. Frequency counter	EE ADJUST MENU, 113. 27 MHz VCO	◎ TP7 (MAIN VCO) GND: TP1 (GND) [Rewrite board] ⌚ SHUTTER dial ☆ 13.5 MHz $\pm$ 0.1 MHz	(1) Press the EDIT SEARCH +/- button to select ADJUST MENU No. 113, "27 MHz VCO". (2) Adjust the frequency to the specified level. (3) Press the SHUTTER dial to store the adjustment data.



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(S)

SECTION 4 CHARTS AND DIAGRAMS

■ SCHEMATIC DIAGRAM NOTES

• Schematic safety precaution

△ Parts are safety related parts.

When replacing them, be sure to use the specified parts.

• Unit of value

Unless otherwise specified

- 1) Resistance is in Ω (1/6 W)
- 2) Capacitance is in μF
- 3) Inductance is in μH

• Expression of wiring

As the following circuit diagram is divided to print on some sheets, such an indication as the following is found in the case the wiring extends over two or more divided sections.

- 1) Circuit diagram divided into two or more sections:

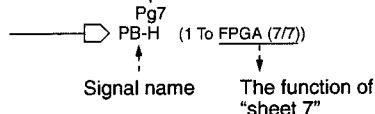
Board	Board Name	Number of divided sections
0 5	DBCP	1/7 to 7/7
0 6	ALS	1/4 to 4/4
1 1	DV/CPU	1/4 to 4/4
1 2	MOA/DC	1/4 to 4/4
2 0	PSIF	1/2 to 2/2

- 2) Indication of wiring which extends to another section:
(Example) This indication that wiring extends to "3/3" of the diagram.



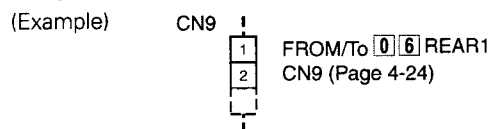
In the above case, the end of the wiring is connected to the "NTSC(L)" on the 3rd section of the diagram.

- B) This indication that wiring extends to "sheet 7" of the diagram.



In the above case, the end of the wiring is connected to the "PB-H" on the "sheet 7" section of the diagram.

• Wiring of connector



In the above example, CN9 is connected with CN9 on **0** **6** REAR1 board.

• Signal flow on the diagram

The following allow marks indicate the specified signal paths respectively.

- ➡ : Recording or EE signal path
- ⇨ : Playback signal path
- ⇨ : Recording and Playback signal path

• Others

In regard of a board assembly whose circuit is composed of multilayered board patterns such 4- or 6-layered patterns, board patterns of the power supply lines and grounding lines are omitted in this section.

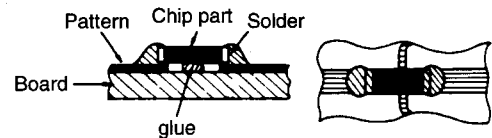
Note: For detail of each electrical part, refer to Section 6 "ELECTRICAL PARTS LIST" by its symbol number.

■ REPLACING SURFACE MOUNT "CHIP" COMPONENTS

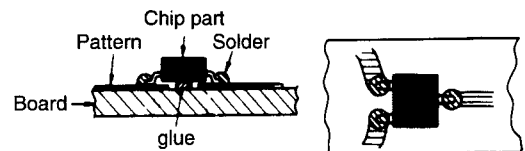
- Some resistors, shorting jumpers (0 resistance), ceramic capacitors, transistors, and diodes are chip parts. These chip parts cannot be reused after they are once removed.
- Chip resistors used in some circuits are of high precision type having little error in resistance.
To demonstrate the full capacity of this set, place an order for proper parts referring to the diagrams and parts lists in the section 5.
- Soldering cautions:
 - 1) Do not apply heat for more than 3 seconds.
 - 2) Avoid using a rubbing stroke when soldering.
 - 3) Discard removed chips; do not reuse them.
 - 4) Supplementary cementing is not required.
 - 5) Use care not to scratch or otherwise damage the chips.

(1) Soldered condition of chip parts

- Resistors, capacitors, etc.



- Transistors, diodes, etc.

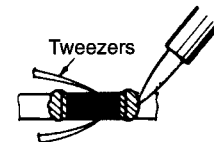


(2) Removing of chip parts

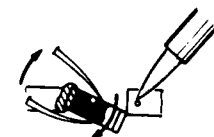
- Resistors, capacitors, etc.
 - i) Melt solder at a side.



- ii) Holding the chip with tweezers, melt solder at the other side.

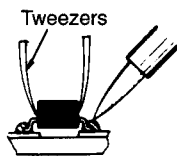


- iii) Take off the chip in twisting and sliding motion.



- Transistors, diodes, etc.

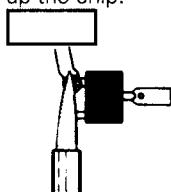
i) Melt solder at the side of single lead.



ii) Lift the unsoldered side upwards.



iii) Simultaneously melt solder at two leads of the other side and pull up the chip.

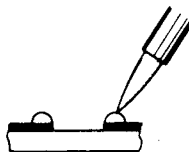


(3) Preheating and soldering of chip parts

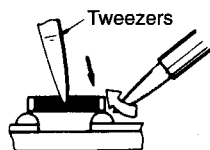
Except transistors, make sure to preheat all chip parts, capacitors in particular, with a hot wind of 150°C approx. (of a hair dryer, etc.) for 2 minutes just before soldering, and immediately solder by a soldering iron of approx. 30 W.

(4) Attaching of chip parts

i) Heap up a proper amount of solder beforehand.

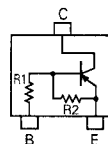
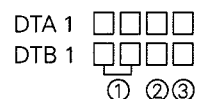
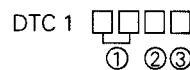


ii) Holding down a new chip by tweezers, solder it to the board by a soldering iron to melt solder from its lower part to the upper part (in the direction shown by a big arrow).

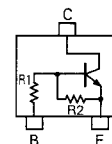


■ CHIP PARTS PIN ARRANGEMENT

[1] Digital transistors



(Top view)



(Top view)

① Two digits show resistance of R1 in abbreviation.

43 : 4.7 kΩ

14 : 10 kΩ

24 : 22 kΩ

44 : 47 kΩ

② Roman letter show the resistive ratio between R1 and R2 in abbreviation.

E : R2/R1 = 1/1

Y : R2/R1 = 5/1

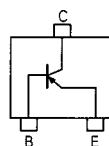
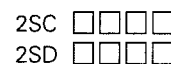
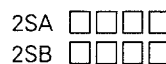
W : R2/R1 = 2/1

X : R2/R1 = 1/2

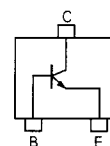
T : R2 is opened.

③ Symbol the shape of resistor in abbreviation.

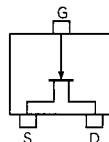
[2] Chip transistors and chip F.E.T.s



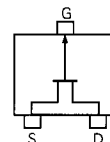
(Top view)



(Top view)



(Top view)



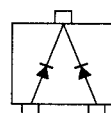
(Top view)

[3] Chip diodes

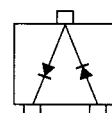
MA143A/MA742

MA142WA

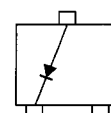
MA142A



(Top view)



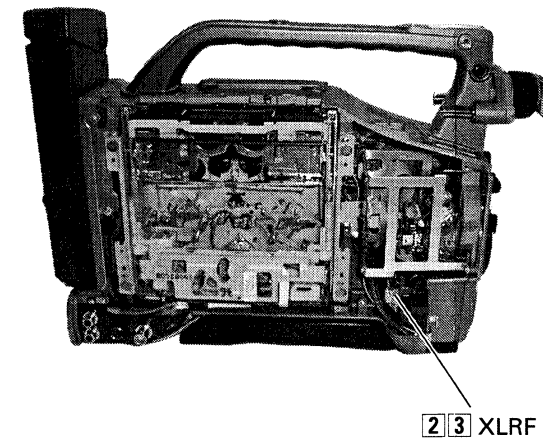
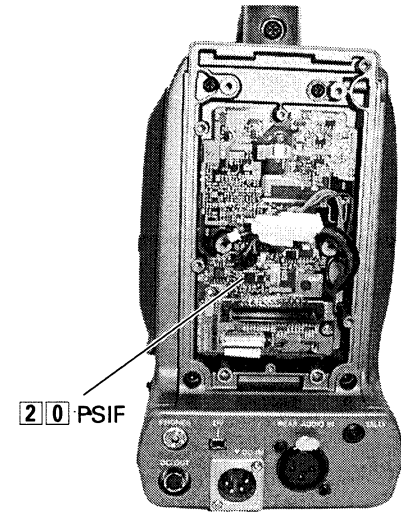
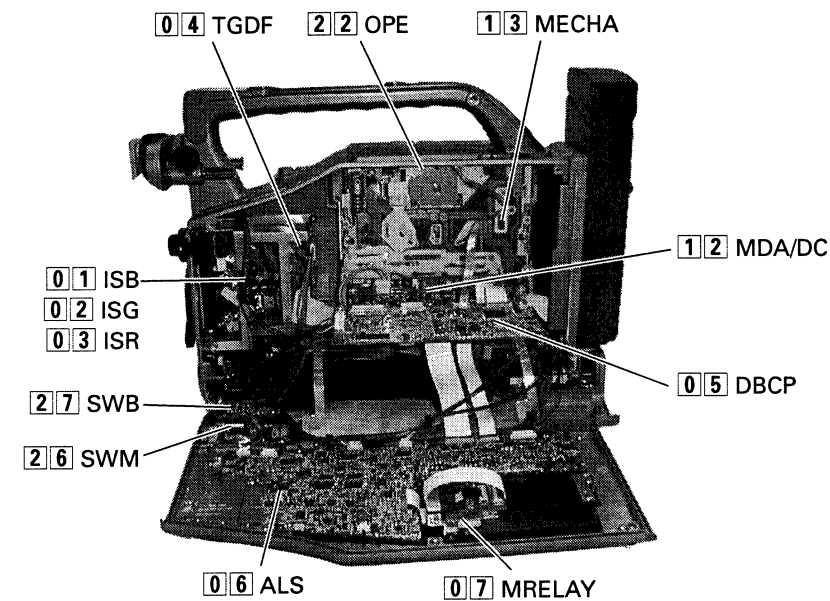
(Top view)



(Top view)

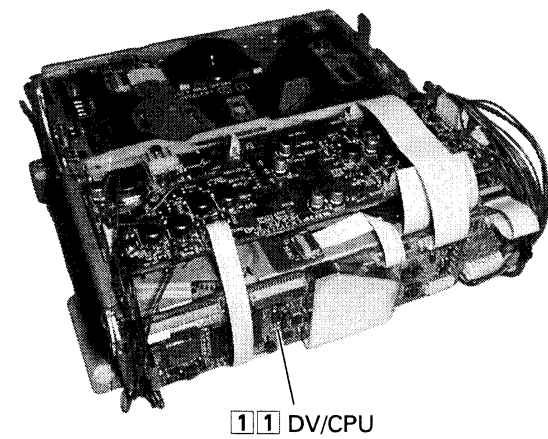
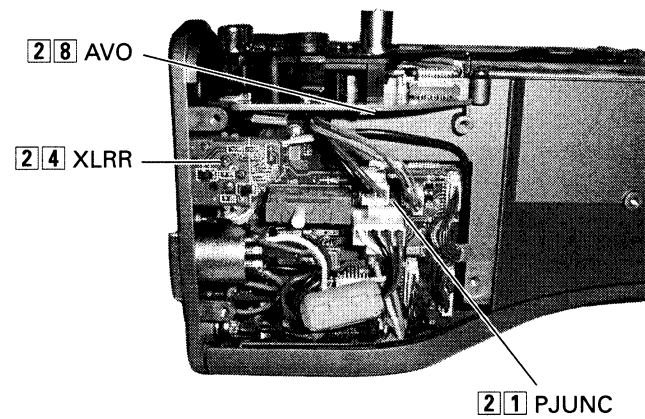
4.1 INDEX TO PAGES OF MAIN BOARDS AND CIRCUIT BOARD LOCATION

4.1.1 Circuit board location

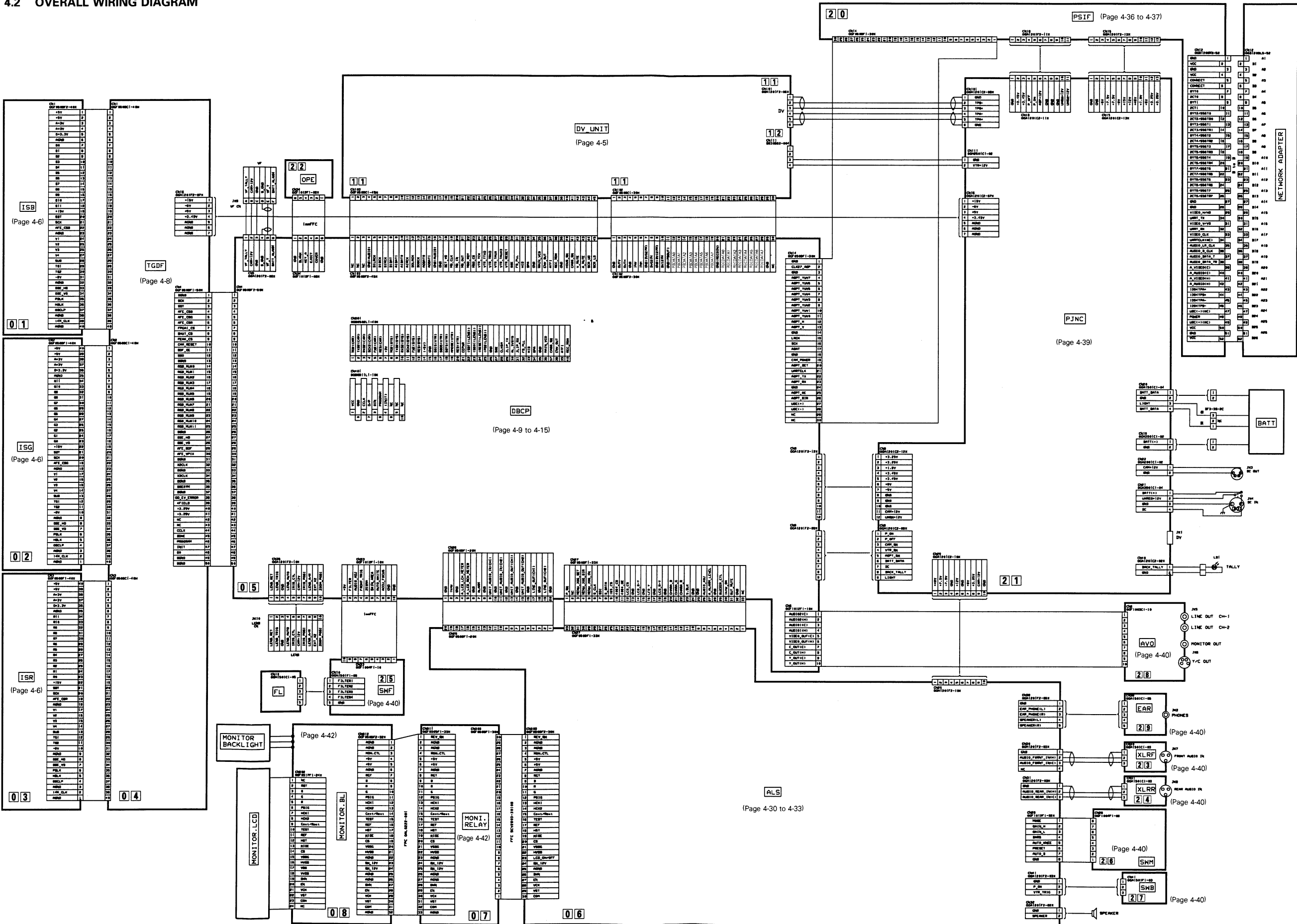


Board No.	Board Name	Page of diagram	
		Schematic diagram	Circuit board
01	ISB	4-6	4-7
02	ISG	4-6	4-7
03	ISR	4-6	4-7
04	TGDF	4-8	4-7
05	DBCP	4-9 to 4-15	4-16, 4-17
06	ALS	4-30 to 4-33	4-34, 4-35
07	M.RELAY	4-42	4-43
08	M.BL	4-42	4-43
11	DV/CPU	4-18 to 4-21	4-22
12	MDA/DC	4-24 to 4-27	4-23
13	MECHA	4-28	4-29

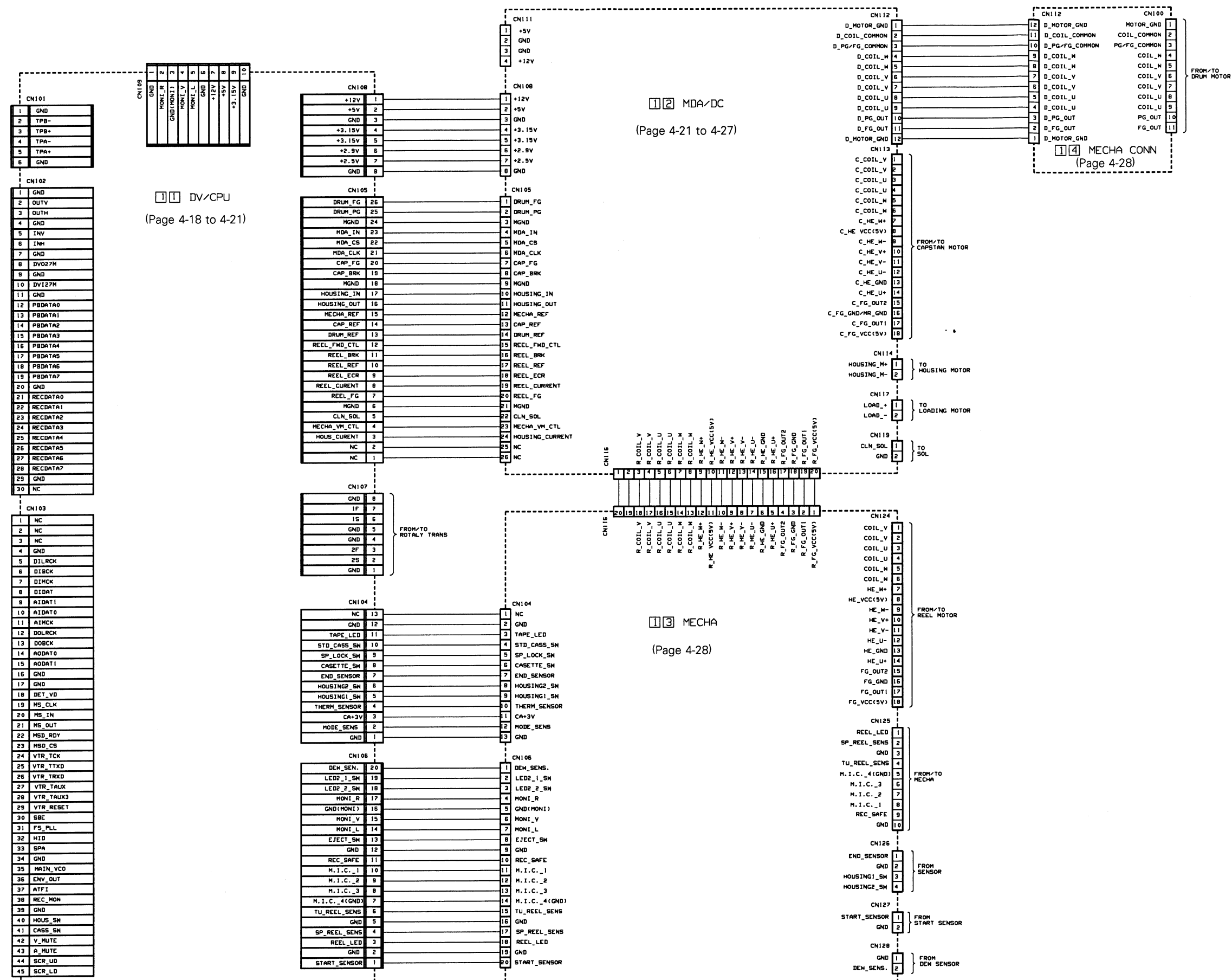
Board No.	Board Name	Page of diagram	
		Schematic diagram	Circuit board
14	MECHA CONN	4-28	4-29
20	PS IF	4-36, 4-37	4-38
21	PJNC	4-29	4-38
22	OPE	4-40	4-41
23	XLRF	4-40	4-41
24	XLRR	4-40	4-41
25	SWF	4-40	4-41
26	SWM	4-40	4-41
27	SWB	4-40	4-41
28	AVO	4-40	4-41
29	EAR	4-40	4-41



4.2 OVERALL WIRING DIAGRAM

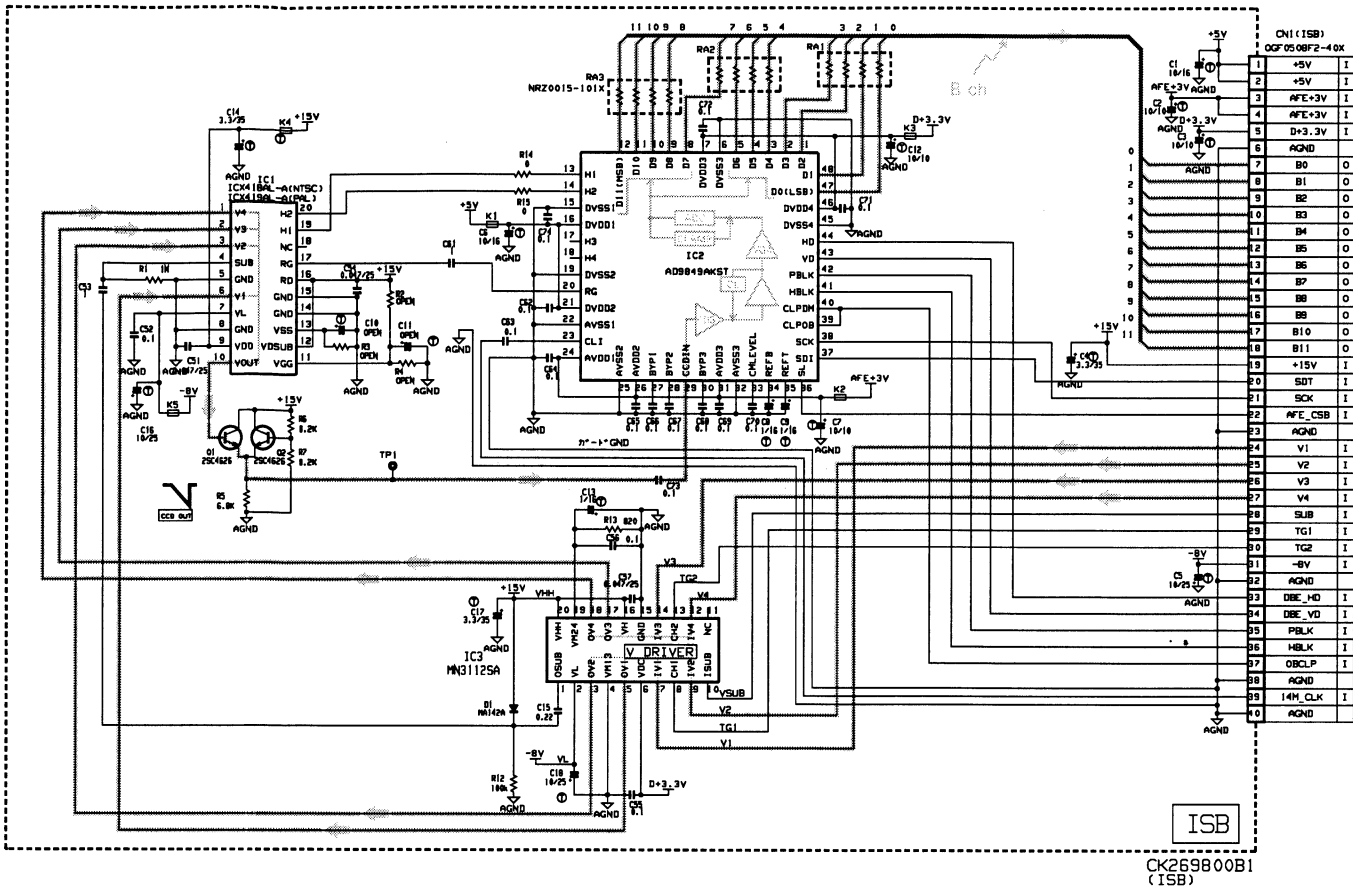


4.3 DV UNIT OVERALL WIRING DIAGRAM



4.4 ISB/G/R SCHEMATIC DIAGRAM

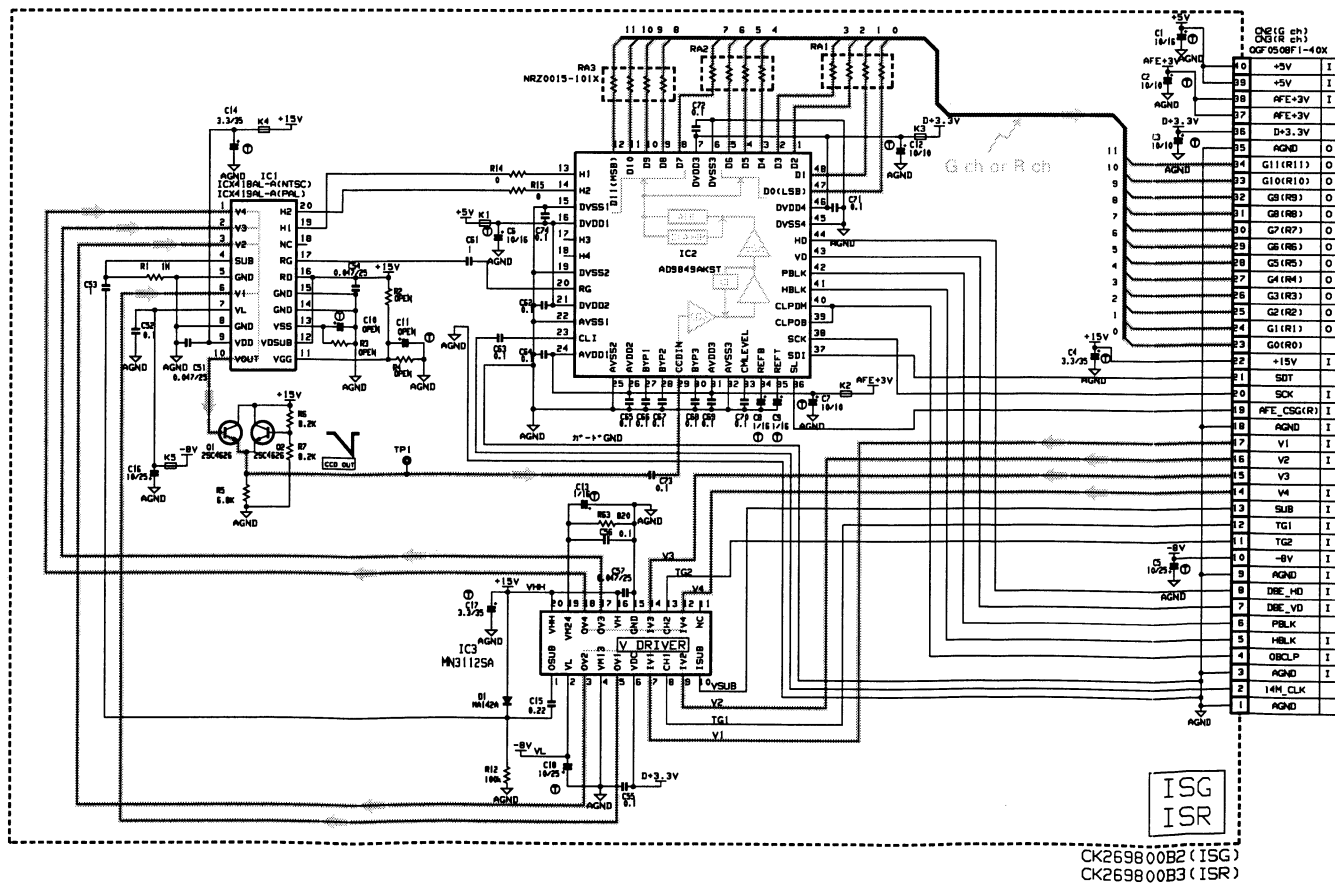
01 ISB



TO 04
TGDF
CN1
(Page 4-8)

02 ISG

03 ISR

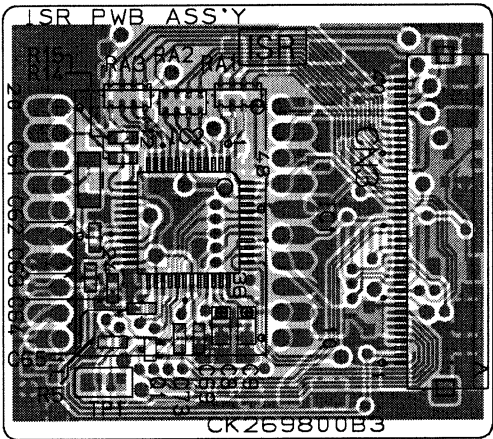


TO 04 TGDF
CN2 (G ch)
CN3 (R ch)
(Page 4-8)

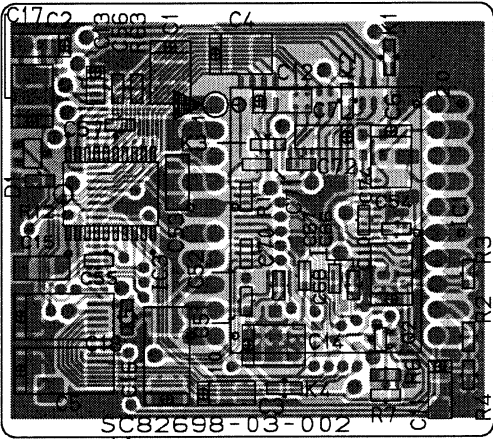
4.5 ISR/G/B CIRCUIT BOARDS

— ISR —

— SIDE A —

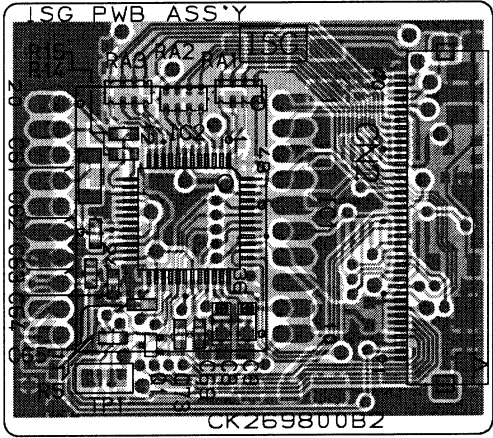


— SIDE B —

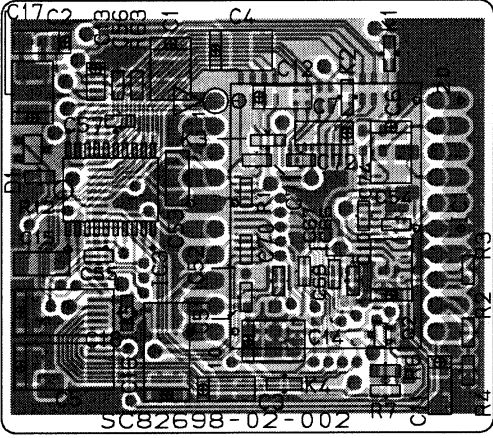


— ISG —

— SIDE A —

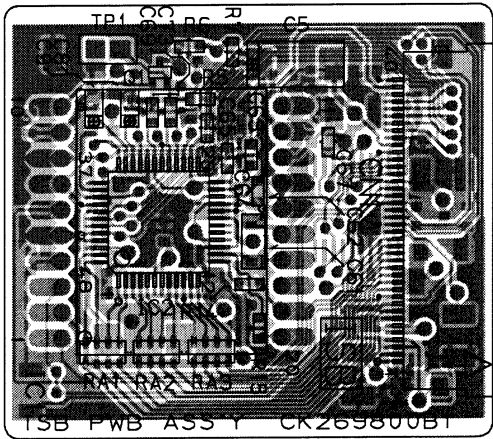


— SIDE B —

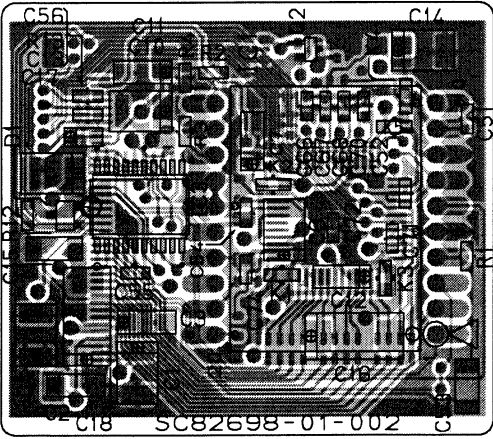


— ISB —

— SIDE A —

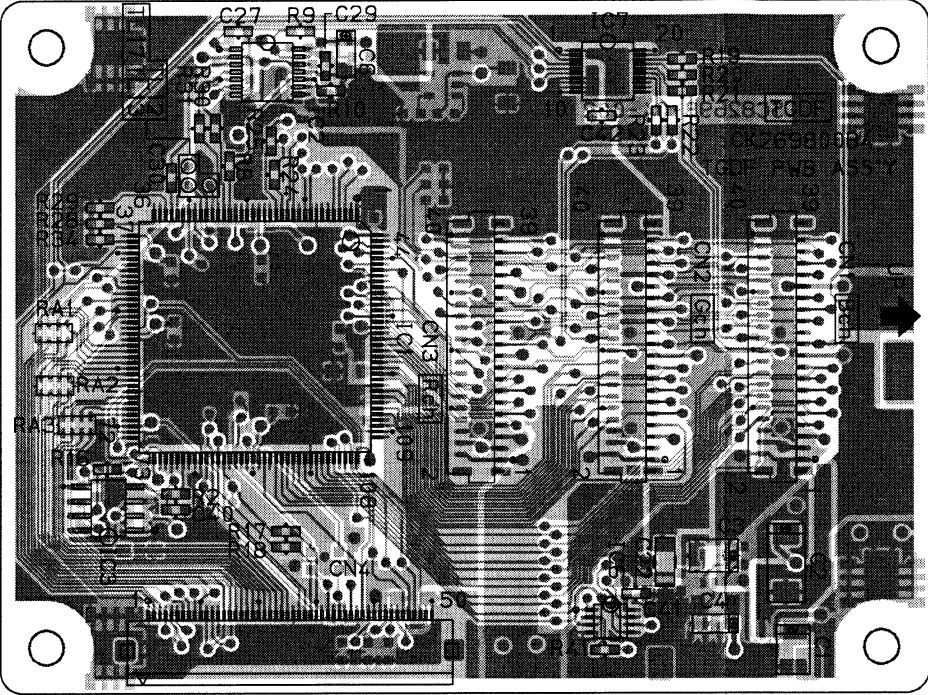


— SIDE B —

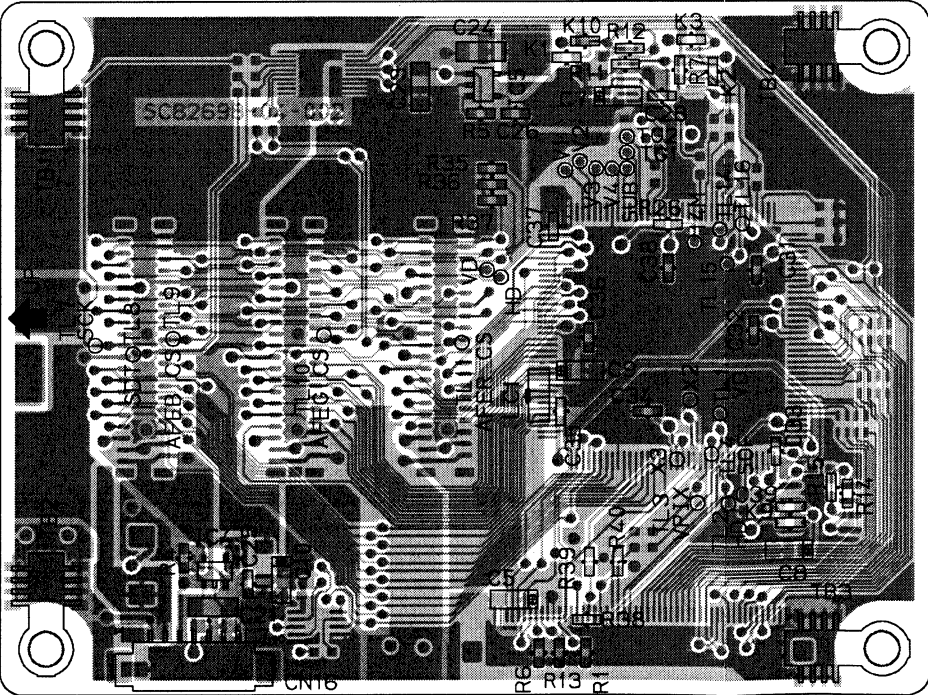


4.6 TGDF CIRCUIT BOARD

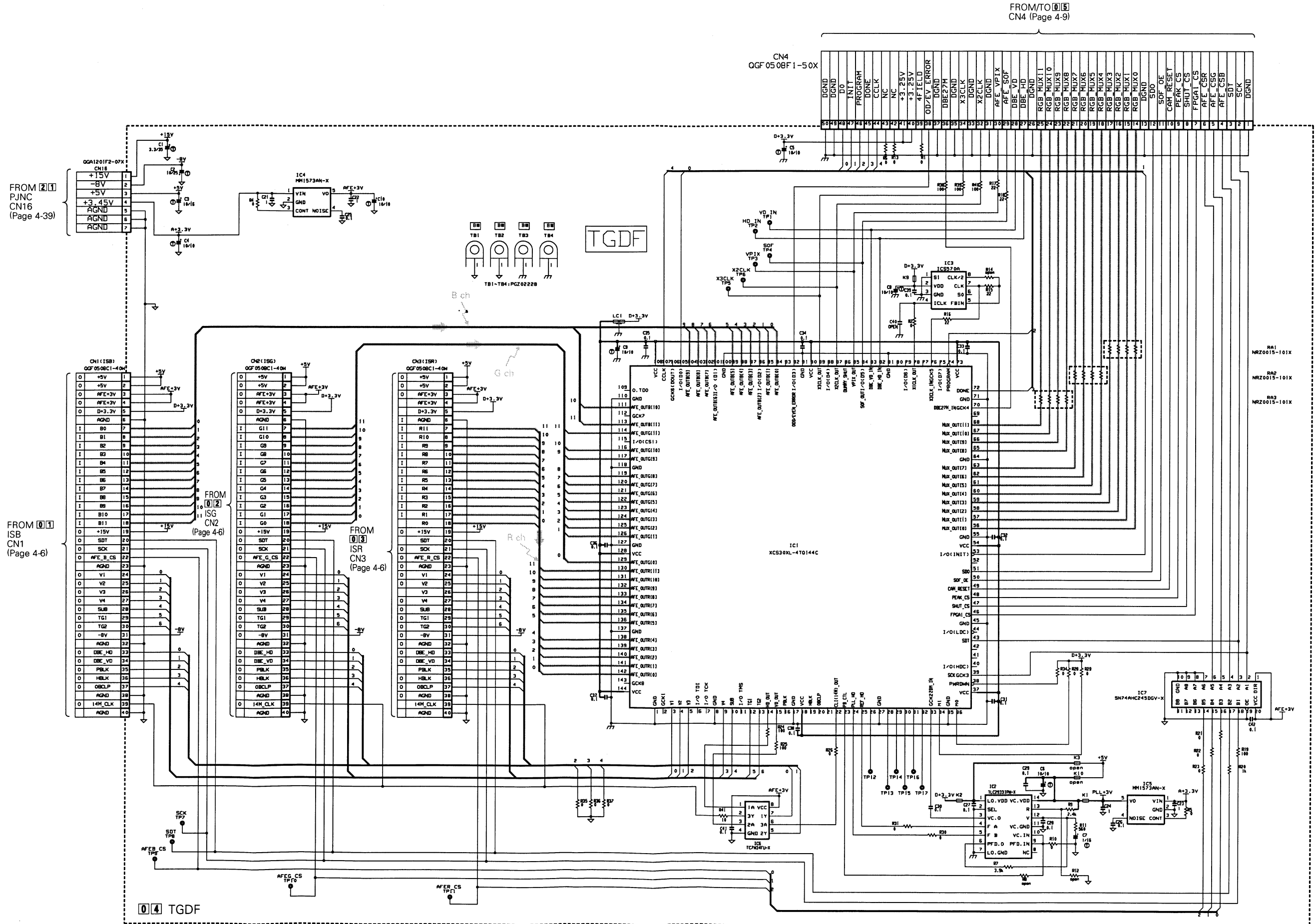
— SIDE A —



— SIDE B —



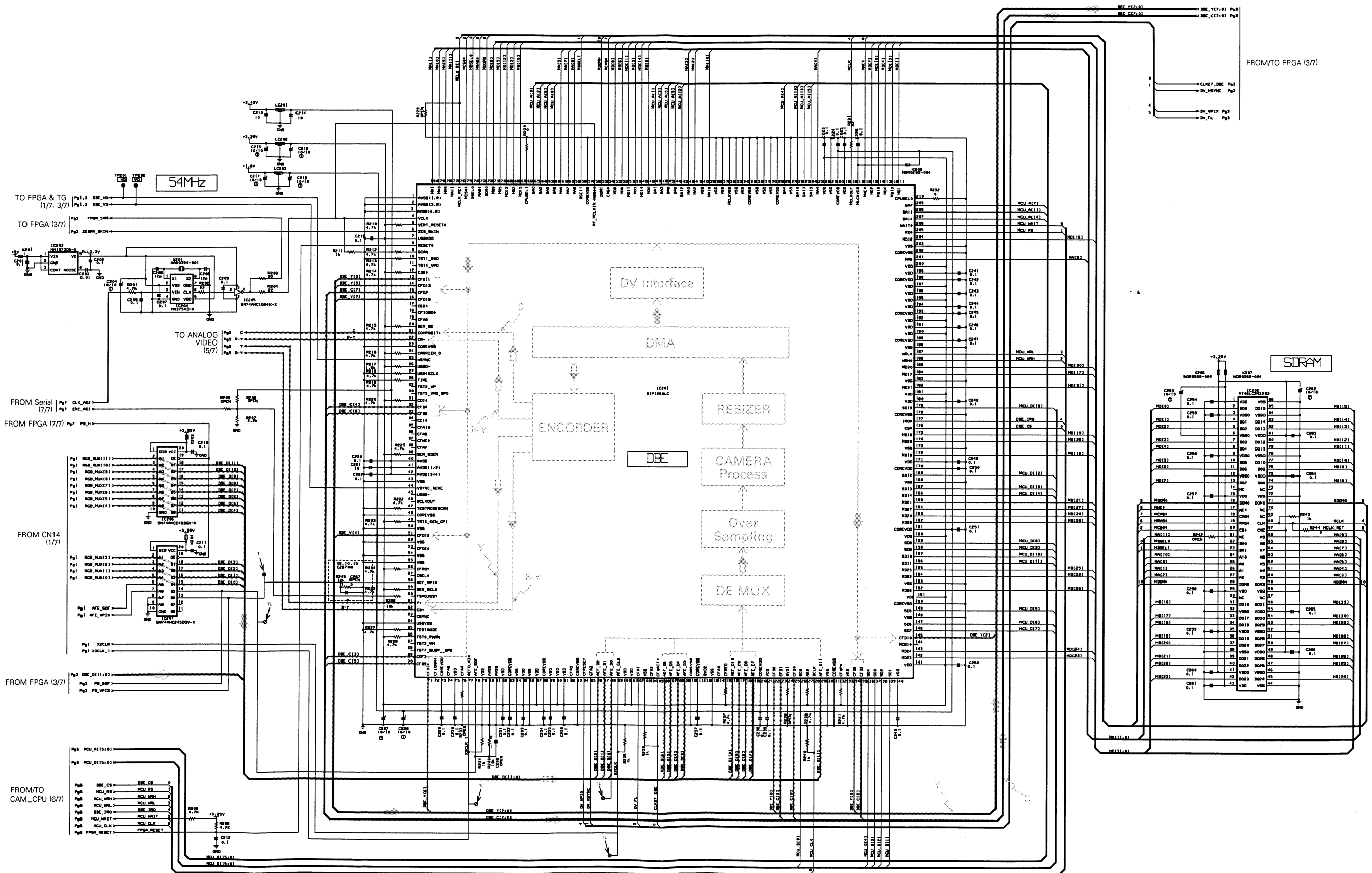
4.7 TGDF SCHEMATIC DIAGRAM

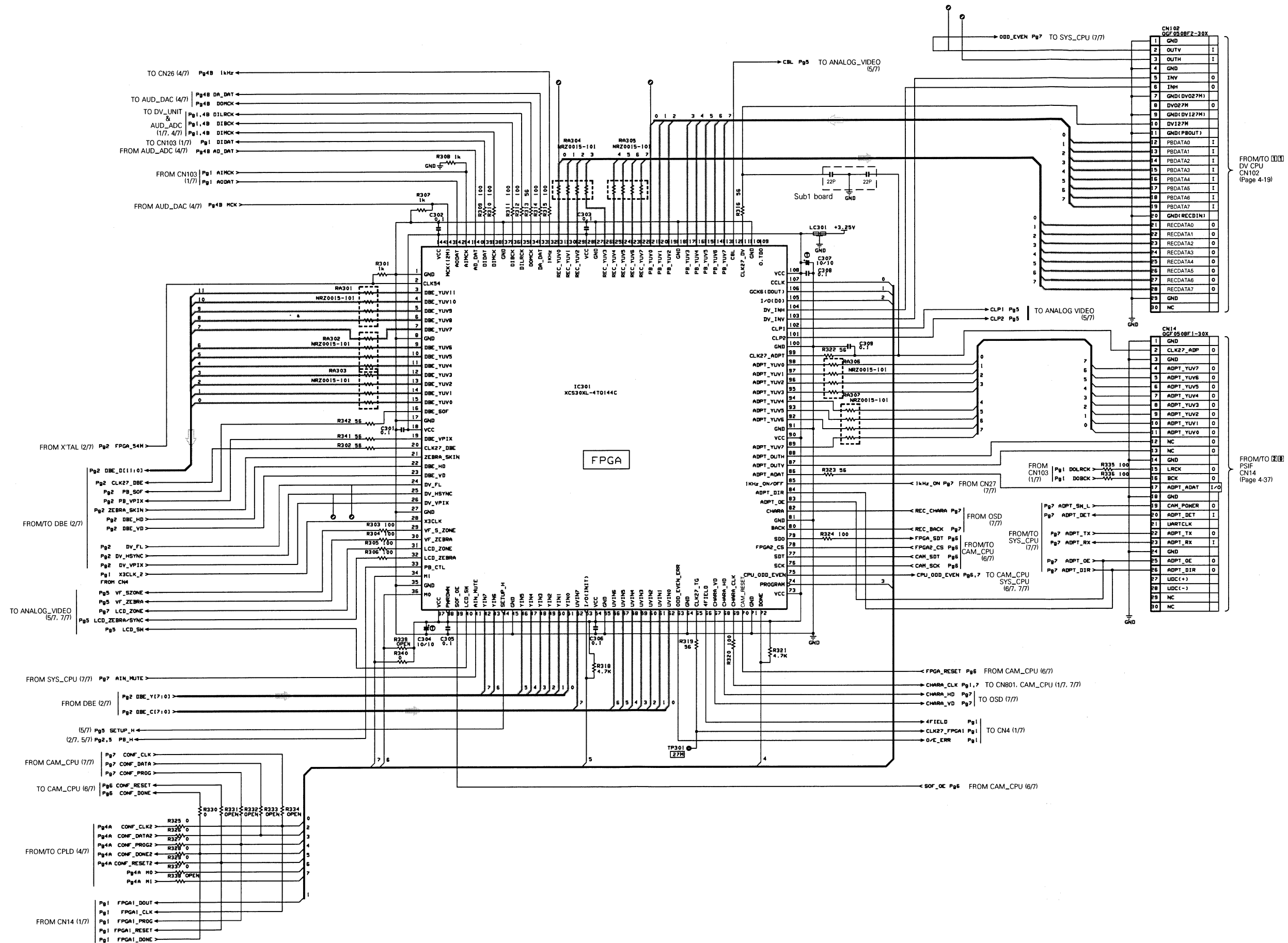


4.8 DBCP SCHEMATIC DIAGRAM 1/7

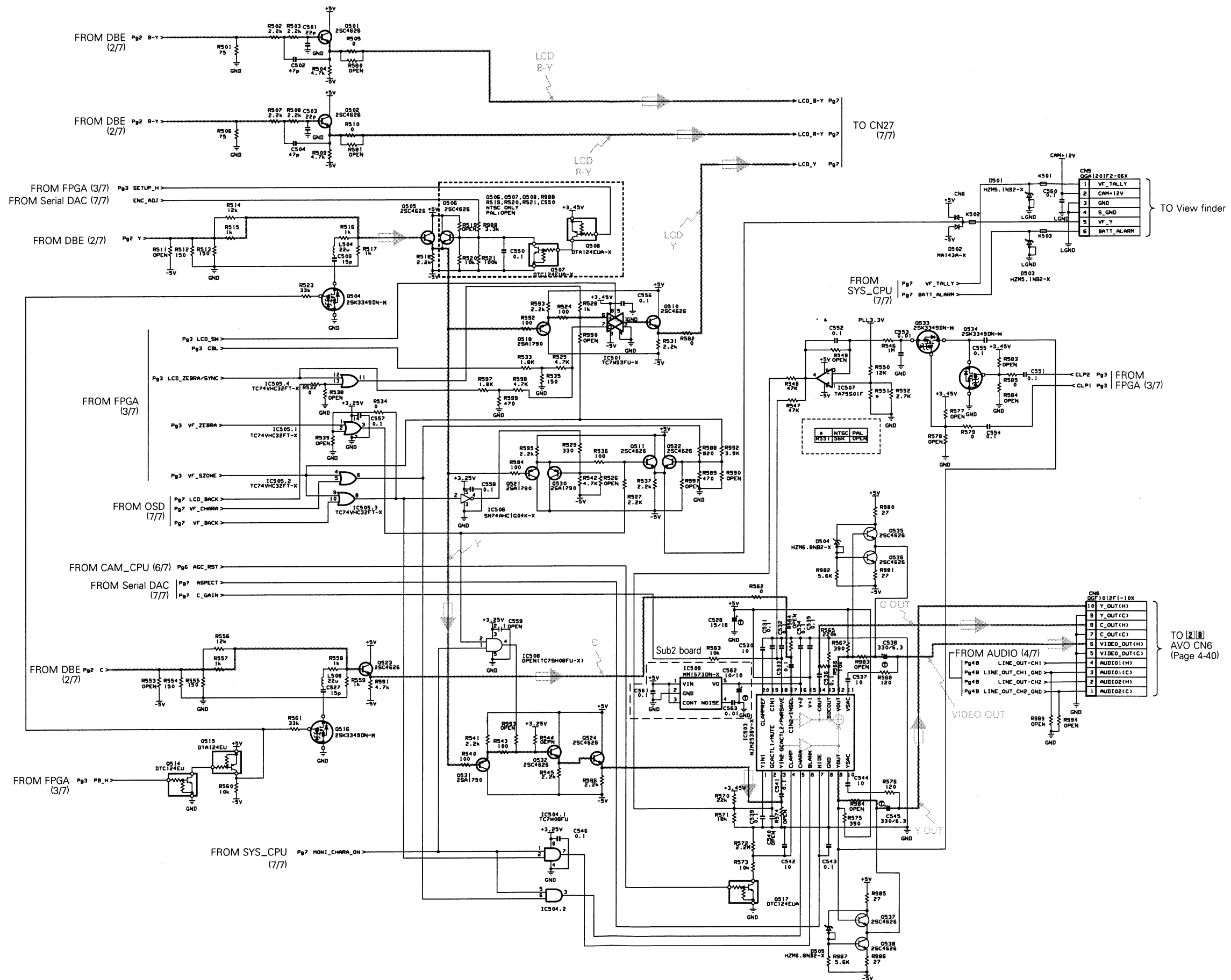


– DBCP SCHEMATIC DIAGRAM 2/7 –

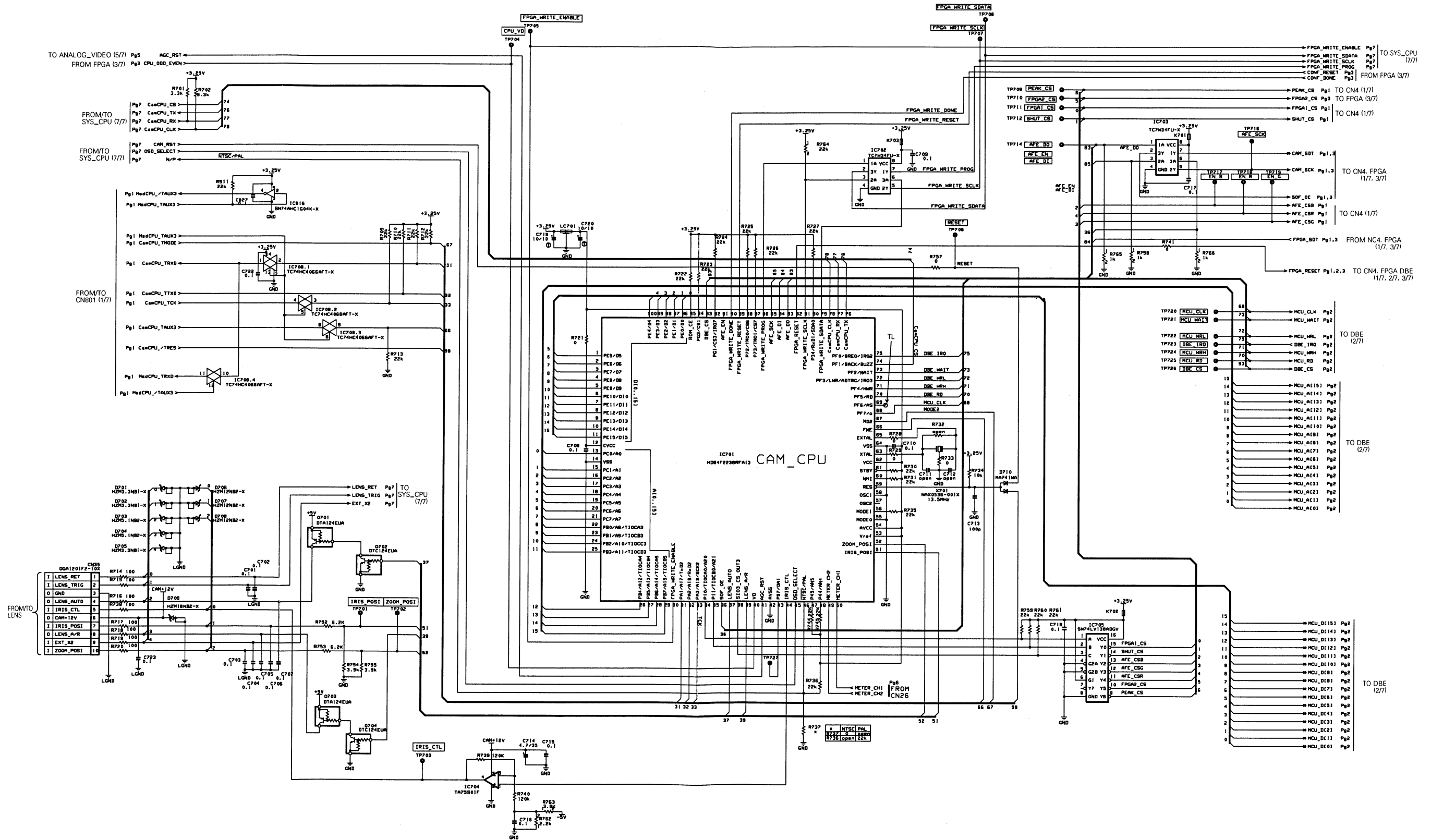




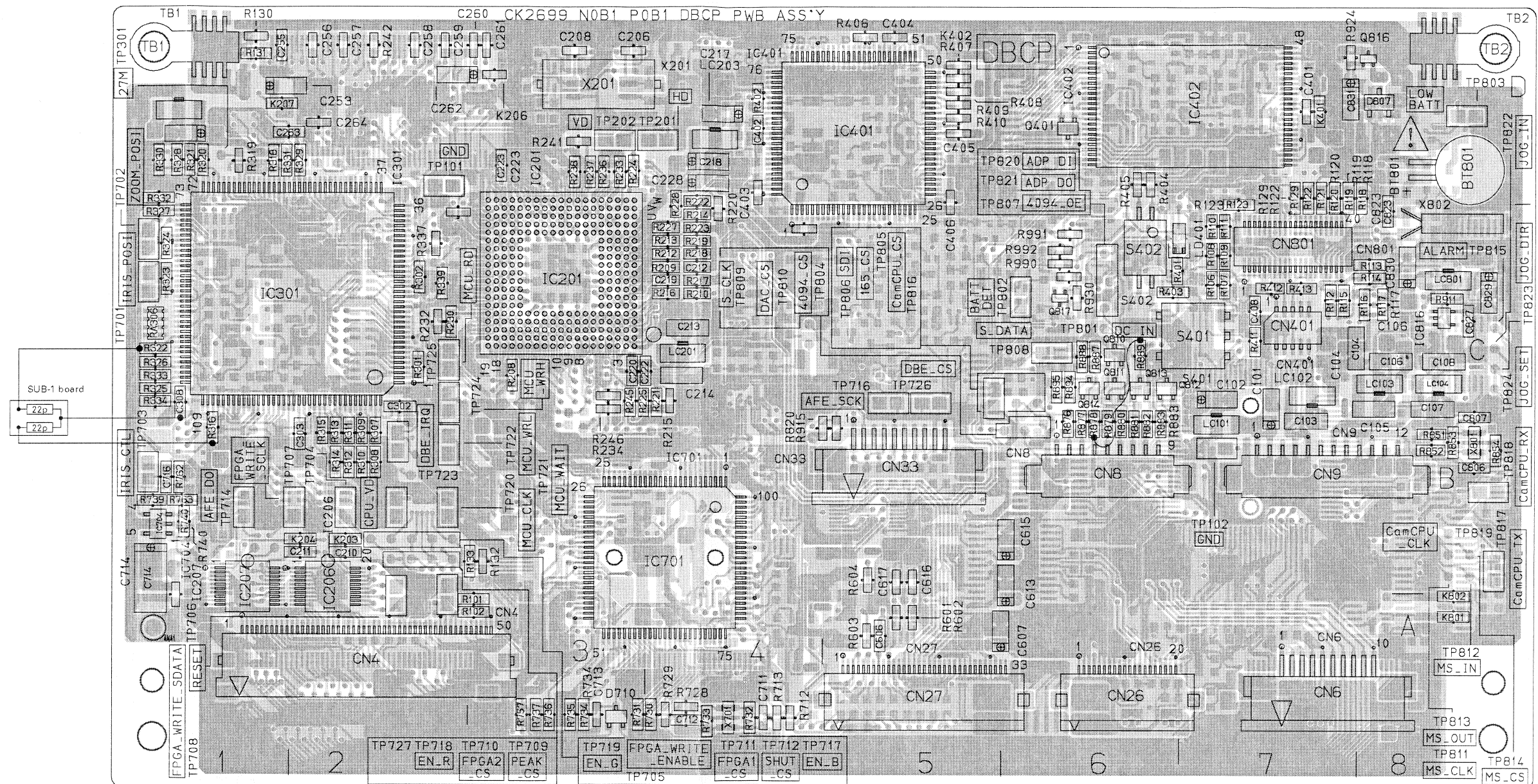




– DBCP SCHEMATIC DIAGRAM 6/7 –

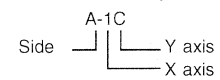


— SIDE A —

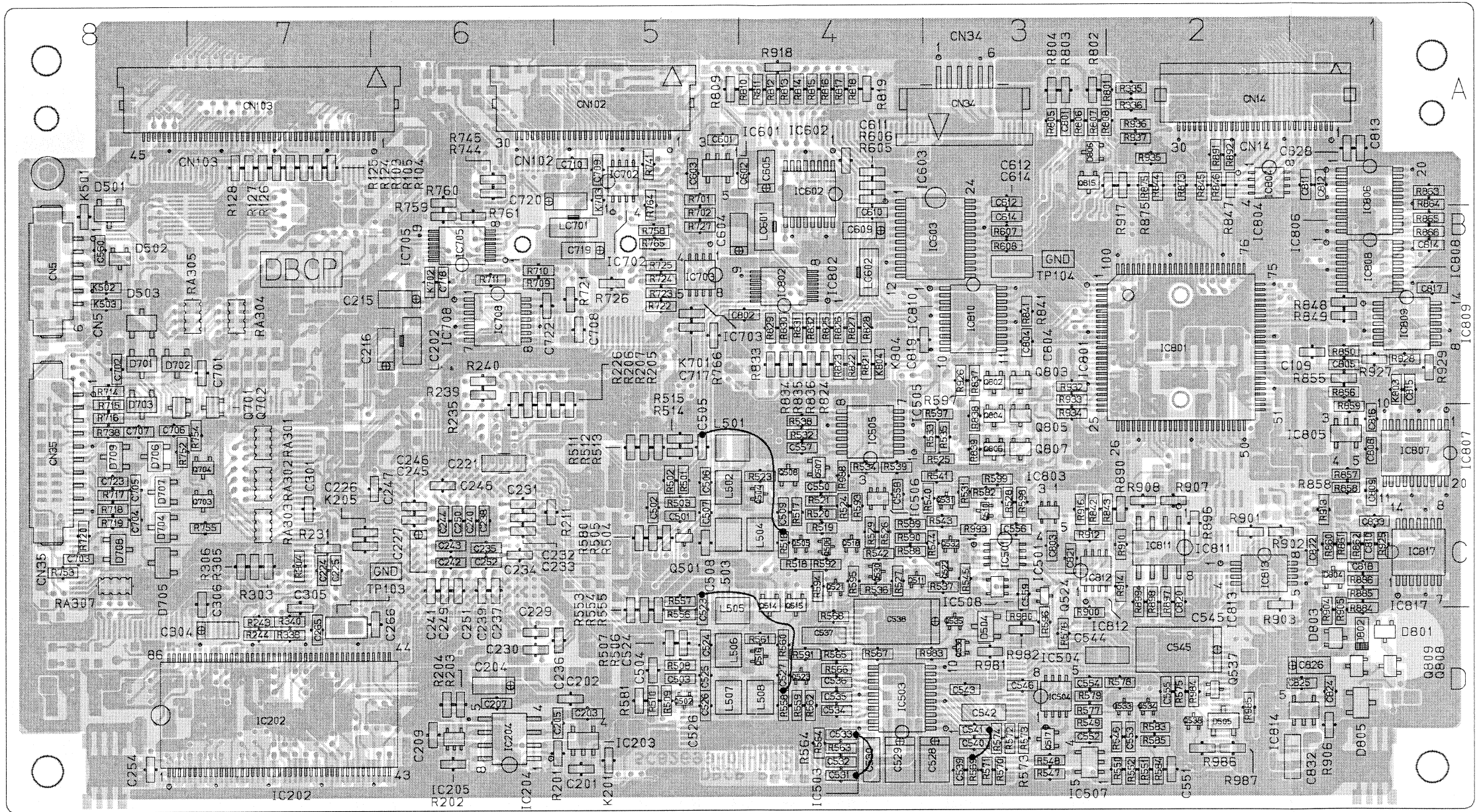


● ADDRESS TABLE OF BOARD PARTS

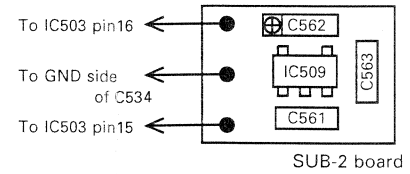
Each address may have an address error by one interval.



IC201	A-3C	IC705	B-6B	Q506	B-4C	Q702	B-7B	D505	B-2D	R106	A-7C	R130	A-1D	R221	A-4B	R245	A-3B	R324	A-1C	R408	A-5D	R519	B-4C	R545	B-3C	R569	B-3D	R595	B-4C	R718	B-8C	R744	B-6A	R809	B-5A	R833	B-4B
IC202	B-7D	IC708	B-6B	Q507	B-4C	Q703	B-7C	D701	B-8B	R107	A-7C	R131	A-1D	R222	A-4C	R246	A-3B	R325	A-1C	R409	A-5D	R520	B-4C	R546	B-2D	R570	B-3D	R596	B-3C	R719	B-8C	R745	B-6A	R810	B-5A	R834	B-4B
IC203	B-5D	IC801	B-2B	Q508	B-4C	Q704	B-7C	D702	B-8B	R108	A-7C	R132	A-3B	R223	A-4C	R301	A-2C	R326	A-1C	R410	A-5D	R521	B-4C	R547	B-3C	R571	B-3D	R597	B-3C	R720	B-8C	R752	B-6C	R811	B-4A	R835	B-4B
IC204	B-6D	IC802	B-4B	Q510	B-3C	Q802	B-3B	D703	B-8B	R109	A-7C	R133	A-2B	R224	A-3D	R302	A-2C	R327	A-1C	R411	A-7C	R523	B-4C	R548	B-3D	R572	B-3D	R598	B-3C	R721	B-5B	R753	B-8C	R812	B-4A	R836	B-4B
IC205	B-6D	IC803	B-3C	Q511	B-4C	Q803	B-3B	D704	B-8C	R110	A-7C	R201	B-6D	R225	A-3B	R303	B-7C	R328	A-1D	R412	A-7C	R524	B-4C	R549	B-3D	R573	B-3D	R599	B-3C	R722	B-5B	R754	B-7C	R813	B-4A	R837	B-3B
IC206	A-2B	IC804	B-2A	Q514	B-4C	Q804	B-3C	D705	B-8C	R111	A-7C	R202	B-6D	R226	B-6B	R304	B-7C	R329	A-2D	R413	A-7C	R525	B-3C	R550	B-2D	R574	B-3D	R601	A-5A	R723	B-5B	R755	B-7C	R814	B-4A	R838	B-3C
IC207	A-1B	IC805	B-1C	Q515	B-4C	Q805	B-3C	D706	B-8C	R112	A-7C	R203	B-6D	R227	A-4C	R305	B-7C	R330	A-1D	R501	B-5C	R526	B-4C	R551	B-2D	R575	B-2D	R602	A-5A	R724	B-5B	R757	A-3A	R815	B-4A	R839	B-3C
IC301	A-2C	IC806	B-1A	Q516	B-4D	Q806	B-3C	D707	B-8C	R113	A-8C	R204	B-6D	R228	A-4C	R306	B-7C	R331	A-1D	R502	B-5C	R527	B-4C	R552	B-2D	R576	B-3D	R603	A-5A	R725	B-5B	R758	B-5B	R816	B-4A	R841	B-3B
IC401	A-5D	IC807	B-1C	Q517	B-3D	Q807	B-3C	D708	B-8C	R114	A-8C	R205	B-5B	R229	A-2C	R307	A-2B	R332	A-1C	R503	B-5C	R528	B-3C	R553	B-5C	R577	B-3D	R604	A-5B	R726	B-5B	R759	B-6B	R817	B-4A	R842	B-3C
IC402	A-7D	IC808	B-1B	Q518	B-4C	Q808	B-1D	D709	B-8C	R115	A-7C	R206	B-6B	R230	A-2C	R308	A-2B	R333	A-1C	R504	B-5C	R529	B-4C	R554	B-5C	R578	B-2D	R605	B-4A	R727	B-5B	R760	B-6A	R818	B-4A	R843	B-3C
IC501	B-3C	IC809	B-1B	Q521	B-4C	Q809	B-1D	D710	A-3A	R116	A-7C	R207	B-6B	R231	B-7C	R309	A-2B	R334	A-1B	R505	B-5C	R531	B-3C	R555	B-5C	R579	B-3D	R606	B-4A	R728	A-4A	R761	B-6B	R819	B-4A	R844	B-2A
IC503	B-4D	IC810	B-3B	Q522	B-3C	Q810	A-6C	D801	B-1D	R117	A-8C	R208	A-3C	R232	A-2C	R310	A-2B	R335	B-2A	R506	B-5D	R532	B-4C	R556	B-5C	R580	B-5C	R607	B-3B	R729	A-4A	R762	A-1B	R820	A-4B	R845	B-2A
IC504	B-3D	IC811	B-2C	Q523	B-4D	Q811	A-6C	D802	B-1D	R118	A-7C	R209	A-4C	R233	A-3D	R311	A-2B	R336	B-2A	R507	B-5D	R533	B-3C	R557	B-5C	R581	B-5D	R608	B-3B	R730	A-4A	R763	A-1B	R821	B-4B	R846	B-2A
IC505	B-4C	IC812	B-3C	Q524	B-3C	Q812	A-6C	D803	B-1D	R119	A-7C	R210	A-4C	R234	A-3B	R312	A-2B	R337	A-2C	R508	B-5D	R534	B-4C	R558	B-4D	R582	B-3C	R701	B-5A	R731	A-3A	R764	B-5A	R822	B-4B	R847	B-2A
IC506	B-4C	IC813	B-2C	Q530	B-4C	Q813	A-6C	D804	B-1C	R120	A-7C	R211	B-6C	R235	B-6B	R313	A-2B	R338	B-7D	R509	B-5D	R535	B-3C	R559	B-4D	R583	B-2D	R702	B-5B	R732	A-4A	R765	B-5B	R823	B-4B	R848	B-1B
IC507	B-3D	IC814	B-1D	Q531	B-3C	Q814	A-6C	D805	B-1D	R121	A-7C	R212	A-4C	R236	A-3D	R314	A-2B	R339	A-2C	R510	B-5D	R536	B-4C	R560	B-4D	R584	B-2D	R709	B-6B	R733	A-4A	R766	B-5B	R824	B-4B	R849	B-1B
IC508	B-3C	IC816	A-8C	Q532	B-3C	Q815	B-3A	D806	B-3A	R122	A-7C	R213	A-4C	R237	A-3D	R315	A-2B	R340	B-7D	R511	B-5C	R537	B-3C	R561	B-4D	R585	B-2D	R710	B-6B	R734	A-3A	R801	B-3A	R825	B-4B	R850	B-1B
IC601	B-5A	IC817	B-1C	Q533	B-2D	Q816	A-8D	D807	A-8D	R123	A-7C	R214	A-4C	R238	A-3D	R316	A-1B	R401	A-6C	R512	B-5C	R538	B-4C	R562	B-4D	R588	B-4C	R711	B-6B	R735	A-3A	R802	B-3A	R826	B-4B	R851	A-8B
IC602	B-4A			Q534	B-2D	Q817	A-6C			R124	B-7A	R215	A-4B	R239	B-6B	R318	A-1D	R402	A-4D	R513	B-5C	R539	B-4C	R563	B-4D	R589	B-4C	R712	A-4A	R736	A-3A	R803	B-3A	R827	B-4B	R852	A-8B
IC603	B-3B	Q401	A-6D	Q535	B-3D			R101	A-3A	R125	B-7A	R216	A-4C	R240	B-6B	R319	A-1D	R403	A-6C	R514	B-5C	R540	B-4C	R564	B-4D	R590	B-4C	R713	A-4A	R737	A-3A	R804	B-3A	R828	B-4B	R853	A-8B
IC701	A-4B	Q501	B-5C	Q536	B-3D	D501	B-8B	R102	A-3A	R126	B-7A	R217	A-4C	R241	A-3D	R320	A-1D	R404	A-6D	R515	B-5C	R541	B-3C	R565	B-4D	R591	B-4D	R714	B-8B	R738	B-8C	R805	B-3A	R829	B-4B	R854	A-8B
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IC703	B-5B	Q504	B-4C	Q538	B-2D	D503	B-8B	R104	B-7A	R128	B-7A	R219	A-4C	R243	B-7D	R322	A-1C	R406	A-5D	R517	B-4C	R543	B-3C	R567	B-4D	R593	B-4C	R716	B-8C	R740	A-1B	R807	B-3A	R831	B-4B	R856	B-1B
IC704	A-1B	Q505	B-4C	Q701	B-8B	D504	B-3D	R105	B-7A	R129	A-7C	R220	A-4C	R244	B-7D	R323	A-1C	R407	A-5D	R518	B-4C	R544	B-3C	R568	B-4C	R594	B-4C	R717	B-8C	R741	B-5A	R808	B-3A	R832	B-4B	R857	B-1C

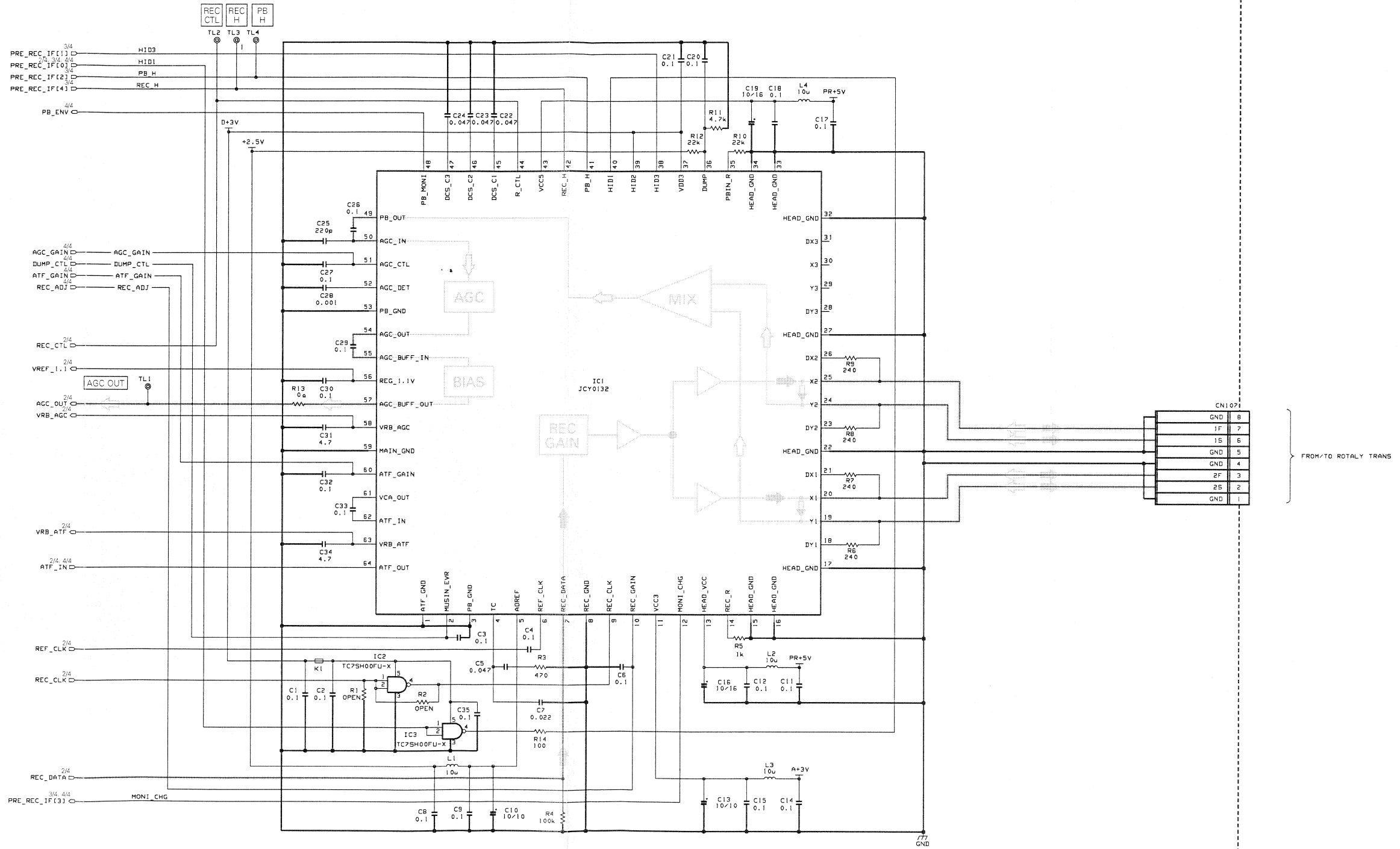


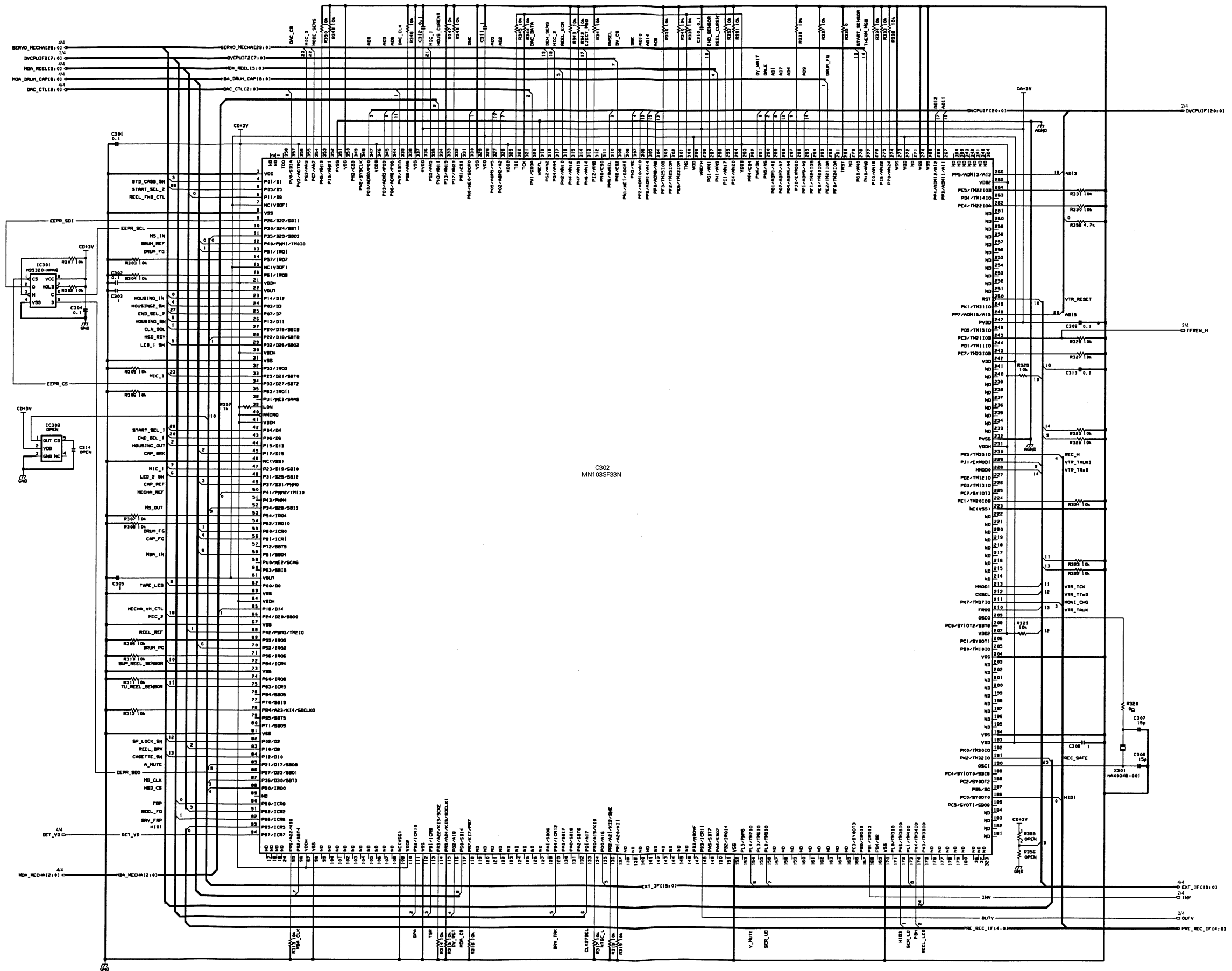
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R860	B-1C	R891	B-2A	R917	B-2A	R987	B-2D	C101	B-5D	C225	B-7C	C249	B-6C	C307	A-1D	C528	B-3D	C555	B-2D	C702	B-8B	C804	B-3B	C828	B-1A	TP704	A-2B	TP803	A-8C	CN6	A-7A	K402	A-5D		
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R862	B-1C	R894	A-6C	R923	B-3A	R990	A-6C	C203	B-5D	C227	B-6C	C251	B-6C	C401	A-7D	C530	B-4D	C557	B-4C	C704	B-8C	C806	A-8B	C830	A-8C	TP706	A-2A	TP805	A-6B	CN9	A-7B	K502	B-8B	TB2	A-8D
R863	B-1A	R895	A-6C	R924	A-7D	R991	A-6C	C204	B-6D	C228	A-4D	C252	B-6C	C402	A-4D	C531	B-4D	C558	B-4C	C705	B-8C	C807	A-8B	C831	A-7D	TP707	A-2B	TP806	A-5B	CN14	B-2A	K503	B-8B		
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R866	B-1B	R898	B-2C	R927	B-1B			C207	B-6D	C231	B-6C	C255	A-1D	C405	A-5D	C534	B-4D	C601	B-5A	C708	B-5B	C810	B-1C			TP710	A-2B	TP809	A-5B	CN33	A-5B	K703	B-5A	L501	B-5C
R873	B-2A	R899	B-2C	R928	B-1B	RA301	B-7C	C208	A-3D	C232	B-6C	C256	A-2D	C406	A-5C	C535	B-4D	C602	B-5A	C709	B-5A	C811	B-1A	LD401	A-6C	TP711	A-2B	TP810	A-6B	CN34	B-3A	K801	A-8A	L502	B-5C
R875	B-2A	R900	B-3C	R929	B-1B	RA302	B-7C	C209	B-6D	C233	B-6C	C257	A-2D	C407	A-4C	C536	B-4D	C603	B-5A	C710	B-5A	C812	B-1A			TP712	A-2B	TP811	A-8B	CN35	B-8C	K802	A-8A	L503	B-5C
R876	B-6B	R901	B-2C	R930	A-6C	RA303	B-7C	C210	A-2B	C234	B-6C	C258	A-2D	C408	A-7C	C537	B-4D	C604	B-5B	C711	A-4A	C813	B-1A	X201	A-3D	TP714	A-1B	TP812	A-8B	CN102	B-5A	K803	B-1B	L504	B-4C
R877	A-6B	R902	B-2C	R931	A-6C	RA304	B-7B	C211	A-2B	C235	B-6C	C259	A-2D	C501	B-5C	C538	B-4D	C605	B-4A	C712	A-4A	C814	B-1B	X701	A-4A	TP716	A-5B	TP813	A-8B	CN103	B-7A	K804	B-4B	L505	B-5C
R878	A-6B	R903	B-2C	R932	B-3B	RA305	B-7B	C212	A-4C	C236	B-5D	C260	A-3D	C502	B-5C	C539	B-3D	C606	A-5A	C713	A-3A	C815	B-1B	X801	A-8B	TP717	A-2B	TP814	A-8B	CN401	A-7C			L506	B-5D
R879	A-6B	R904	B-1C	R933	B-3B	RA306	A-1C	C213	A-4C	C237	B-6C	C261	A-3D	C503	B-5D	C540	B-3D	C607	A-5A	C714	A-1B	C816	B-1C	X802	A-8C	TP718	A-2B	TP815	A-8C	CN801	A-7C	LC101	A-7B	L507	B-5D
R880	A-6B	R905	B-1C	R934	B-3C	RA307	B-8C	C214	A-4C	C238	B-6C	C262	A-2D	C504	B-5D	C541	B-3D	C608	B-4A	C715	A-1A	C817	B-1B			TP719	A-2B	TP816	A-6B			LC102	A-7B	L508	B-4D
R881	A-6B	R906	B-1D	R935	B-2A			C215	B-6B	C239	B-6C	C263	A-1D	C505	B-5C	C542	B-3D	C609	B-4B	C716	A-1B	C818	B-1C	TP101	A-2D	TP720	A-2B	TP817	A-8B	S401	A-7C	LC103	A-8C		
R882	A-6B	R907	B-2C	R936	B-2A	C101	A-7B	C216	B-6B	C240	B-6C	C264	A-2D	C506	B-5C	C543	B-3D	C610	B-4B	C717	B-5B	C819	B-4B	TP102	A-7B	TP721	A-2B	TP818	A-8B	S402	A-6C	LC104	A-8C		
R883	A-6B	R908	B-2C	R937	B-2A	C102	A-7B	C217	A-4D	C241	B-6C	C265	B-7D	C507	B-5C	C544	B-3C	C611	B-4A	C718	B-6B	C820	B-2C	TP103	B-7D	TP722	A-2B	TP819	A-8B			LC201	A-4C		
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R887	A-6C	R913	B-1C	R983	B-3D	C106	A-8C	C221	B-6C	C245	B-6C	C303	A-2B	C524	B-5D	C551	B-2D	C615	A-5B	C723	B-8C	C824	B-1C	TP203	A-1D	TP726	A-5B	TP823	A-8C	K205	B-7C	LC601	B-4B		
R888	A-6C	R914	B-2C	R984	B-2D	C107	A-8B	C222	A-3C	C246	B-6C	C304	B-7D	C525	B-5D	C552	B-3D	C616	A-5B	C801	B-3A	C825	B-1D	TP701	A-1C	TP727	A-2B	TP824	A-8C	K206	A-3D	LC602	B-4B		

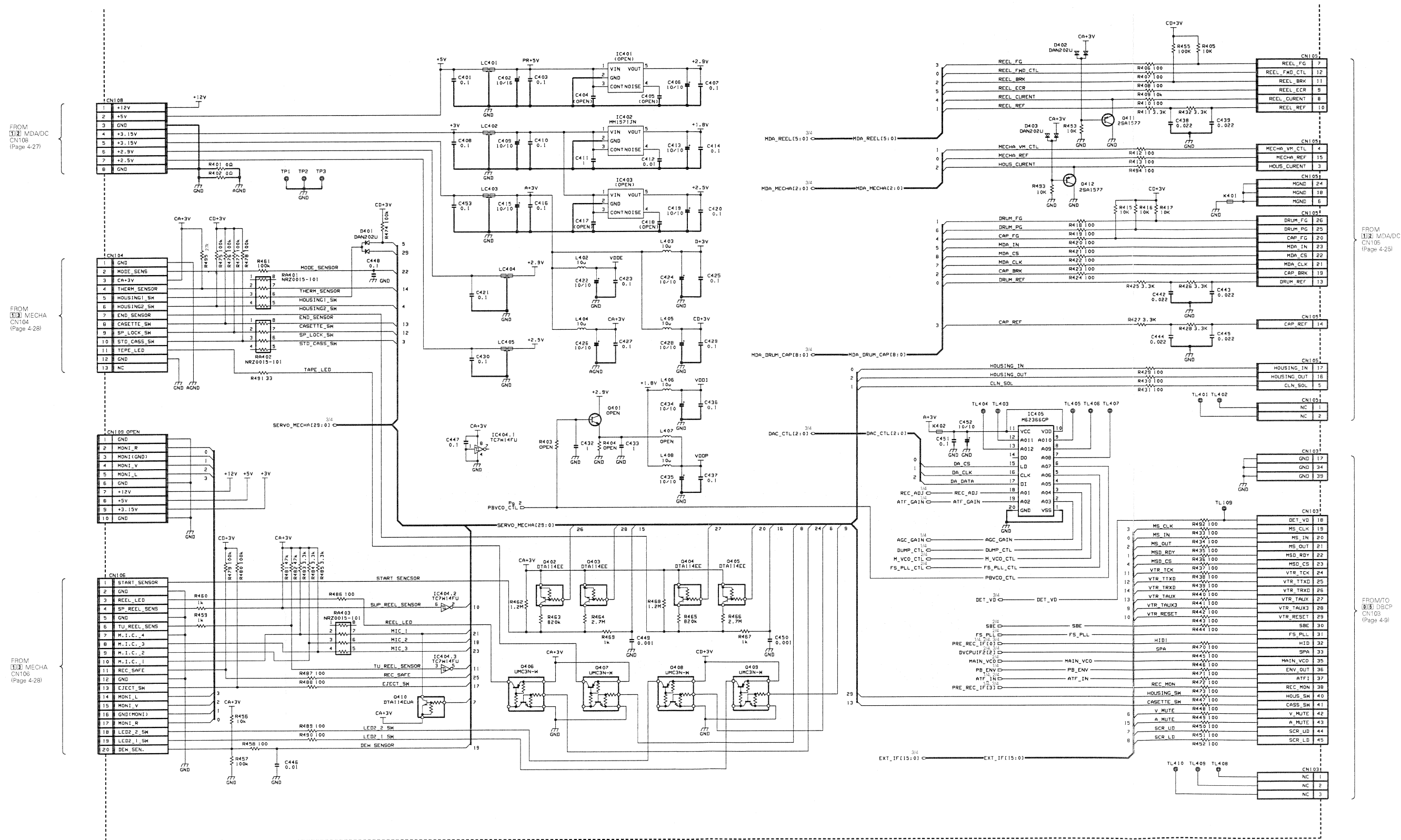


4.10 DV/CPU SCHEMATIC DIAGRAM 1/4

11 DV/CPU

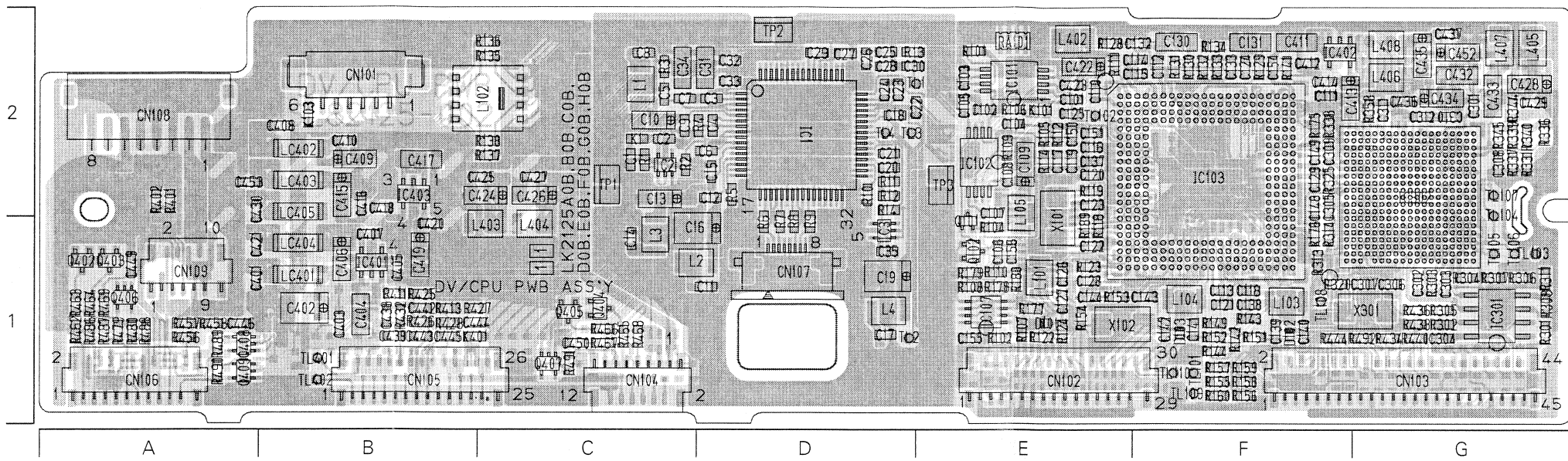




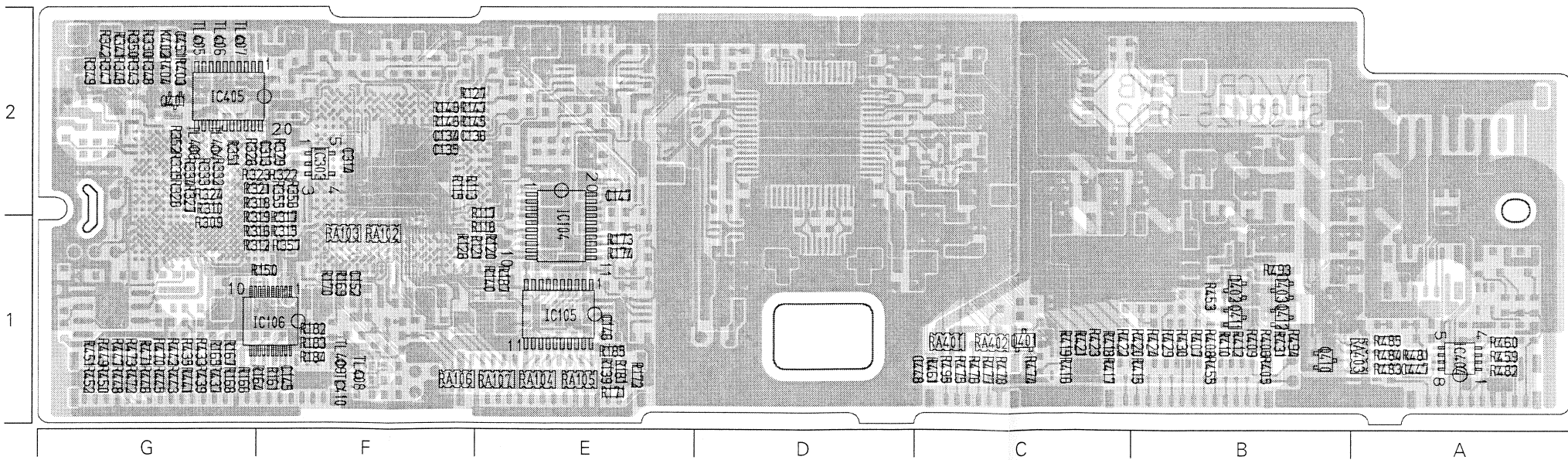


4.11 DV/CPU CIRCUIT BOARD

— SIDE A —

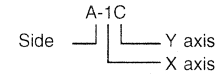


— SIDE B —



● ADDRESS TABLE OF BOARD PARTS

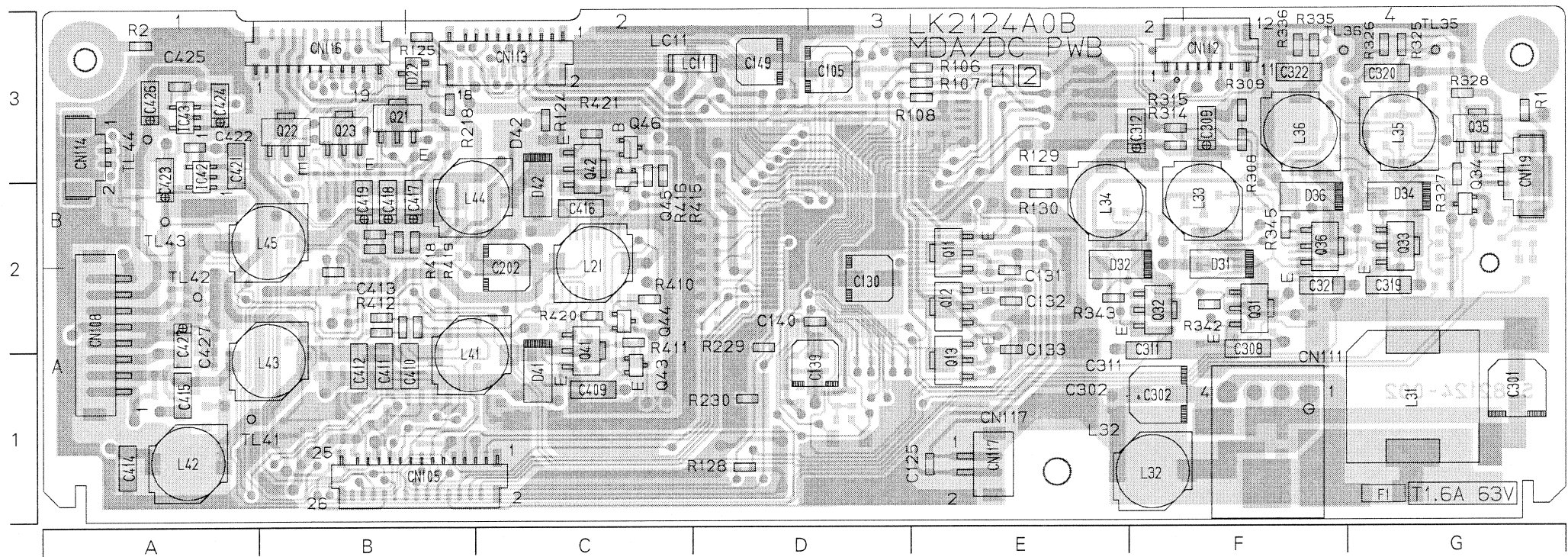
Each address may have an address error by one interval.



IC1	A-2D	R136	A-2C	R339	A-2G	R473	B-1G	C119	A-2E	C439	A-1B
IC2	A-2C	R137	A-2C	R340	A-2G	R474	B-1C	C120	A-2F	C442	A-1B
IC3	A-1D	R138	A-2C	R341	B-2G	R475	B-1C	C121	A-1F	C443	A-1B
IC101	A-2E	R139	B-1E	R342	B-2G	R476	B-1C	C122	A-1F	C444	A-1B
IC102	A-2E	R140	B-1E	R343	B-2G	R477	B-1C	C123	A-2E	C445	A-1B
IC103	A-2F	R141	A-2F	R344	A-2G	R478	B-1C	C124	A-2F	C446	A-1A
IC104	A-2E	R142	A-1F	R345	A-2G	R479	A-1A	C125	A-2E	C447	B-1A
IC105	B-1E	R143	A-1F	R346	B-2G	R480	A-1A	C126	A-1E	C448	B-1C
IC106	B-1F	R144	A-1F	R347	B-2G	R481	B-1A	C127	A-1E	C449	A-1A
IC107	A-1E	R145	B-2F	R348	B-2G	R482	B-1A	C128	A-1E	C450	A-1C
IC301	A-1G	R146	B-2F	R349	B-2G	R483	B-1A	C129	A-2F	C451	B-2G
IC302	A-2G	R147	B-2F	R350	B-2G	R484	B-1A	C130	A-2F	C452	A-2G
IC303	B-2F	R148	B-2F	R351	B-2G	R485	B-1A	C131	A-2F	C453	A-2A
IC401	A-1B	R149	A-1F	R352	B-2G	R486	A-1A	C132	A-2F		
IC402	A-2F	R150	B-1F	R355	B-2F	R487	A-1A	C133	A-2F	X101	A-1E
IC403	A-2B	R151	A-1F	R356	B-2F	R488	A-1A	C134	B-2F	X102	A-1E
IC404	B-1A	R152	A-1F	R357	B-1F	R489	A-1A	C135	B-2F	X301	A-1G
IC405	B-2G	R153	A-1E	R358	A-2G	R490	A-1A	C136	B-2F		
		R154	A-1E	R401	A-2A	R491	A-1C	C137	A-2E	TP1	A-2C
Q101	A-1E	R155	A-1F	R402	A-2A	R492	A-1G	C138	A-1F	TP2	A-2E
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Q401	B-2G	R157	A-1F	R404	B-2G	R494	B-1B	C140	A-1F		
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Q405	A-1C	R161	B-1F	R408	B-1B	RA102	B-1F	C144	A-1F	CN104	A-1C
Q406	A-1A	R164	B-1F	R409	B-1B	RA103	B-1F	C145	B-1F	CN105	A-1B
Q407	A-1C	R165	B-1G	R410	B-1B	RA104	B-1E	C146	B-1E	CN106	A-1A
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Q409	A-1A	R167	B-1G	R412	B-1B	RA106	B-1F	C148	A-2F	CN108	A-2A
Q410	B-1B	R168	B-1G	R413	A-1B	RA107	B-1E	C149	A-2F	CN109	A-1A
Q411	B-1B	R169	B-1F	R415	B-1B	RA401	B-1C	C150	A-2E		
Q412	B-1B	R170	B-1F	R416	B-1C	RA402	B-1C	C151	A-2E	K1	A-2C
		R171	B-1E	R417	B-1C	RA403	B-1A	C152	B-1F	K101	A-2E
D101	A-1E	R172	B-1E	R418	B-1C			C154	A-2F	K103	A-2B
D102	A-1F	R173	B-1E	R419	B-1C	C1	A-2C	C155	A-1E	K401	A-1B
D103	A-1F	R174	B-1E	R420	B-1B	C2	A-2C	C156	A-1E	K402	B-2G
D401	B-1C	R175	A-2F	R421	B-1C	C3	A-2D	C301	A-2G		
D402	B-1B	R176	A-1F	R422	B-1C	C4	A-2D	C302	A-1G	LC401	A-1B
D403	B-1B	R177	A-1E	R423	B-1C	C5	A-2C	C303	A-1G	LC402	A-2B
		R178	A-1E	R424	B-1B	C6	A-2D	C304	A-1G	LC403	A-2B
R1	A-2C	R179	A-1E	R425	A-1B	C7	A-2C	C305	A-2F	LC404	A-1A
R2	A-2C	R180	A-1E	R426	A-1B	C8	A-2C	C306	A-1G	LC405	A-2B
R3	A-2C	R181	B-1E	R427	A-1B	C9	A-2C	C307	A-1G		
R4	A-2D	R182	B-1F	R428	A-1B	C10	A-2C	C308	A-2G	L1	A-2C
R5	A-2D	R183	B-1F	R429	B-1B	C11	A-1D	C309	A-2F	L2	A-1C
R6	A-1D	R184	A-1F	R430	B-1B	C12	A-2D	C310	A-2G	L3	A-1C
R7	A-1D	R185	B-1E	R431	B-1B	C13	A-2C	C311	A-2G	L4	A-1D
R8	A-1D	R187	B-1E	R432	A-1B	C14	A-1C	C312	A-2G	L101	A-1E
R9	A-1D	R189	A-1E	R433	B-1G	C15	A-2D	C313	B-2F	L102	A-2C
R10	A-2D	R301	A-1G	R434	A-1G	C16	A-1D	C314	B-2F	L103	A-1F
R11	A-2D	R302	A-1G	R435	B-1G	C17	A-1D	C401	A-1A	L104	A-1F
R12	A-2D	R303	A-1G	R436	A-1G	C18	A-2D	C402	A-1B	L105	A-2E
R13	A-2D	R304	A-1G	R437	B-1G	C19	A-1D	C403	A-1B	L402	A-2E
R14	A-2D	R305	A-1G	R438	A-1G	C20	A-2D	C404	A-1B	L403	A-1C
R101	A-2E	R306	A-1G	R439	B-1G	C21	A-2D	C405	A-1B	L404	A-1C
R102	A-1E	R307	A-1G	R440	A-1G	C22	A-2E	C406	A-1B	L405	A-2G
R104	A-1E	R308	A-1G	R441	B-1G	C23	A-2D	C407	A-1B	L406	A-2G
R105	A-2E	R309	A-1G	R442	B-1G	C24	A-2D	C408	A-2B	L407	A-2G
R106	A-2E	R310	B-2G	R443	A-1G	C25	A-2D	C409	A-2B	L408	A-2G
R107	A-1E	R311	A-1G	R444	B-1F	C26	A-2D	C410	A-2B		
R108	A-1E	R312	B-1F	R445	B-1G	C27	A-2D	C411	A-2F	TL1	A-2E
R109	A-2E	R313	A-1F	R446	B-1G	C28	A-2D	C412	A-2F	TL2	A-1D
R110	A-1E	R314	A-1F	R447	B-1G	C29	A-2D	C413	A-2F	TL3	A-2D
R111	A-2E	R315	A-1F	R448	B-1G	C30	A-2D	C414	A-2F	TL4	A-2D
R112	A-2E	R316	B-1F	R449	B-1G	C31	A-2D	C415	A-2B	TL101	A-1F
R113	B-2F	R317	B-1F	R450	B-1G	C32	A-2D	C416	A-2B	TL102	A-2E
R114	A-2E	R318	B-2F	R451	B-1G	C33	A-2D	C417	A-2B	TL103	A-1G
R115	B-2F	R319	B-1F	R452	B-1G	C34	A-2C	C418	A-2B	TL104	A-2G
R116	B-1E	R320	A-1F	R453	B-1B	C35	A-1D	C419	A-1B	TL105	A-1G
R117	B-2E	R321	B-2F	R455	B-1B	C101	A-2E	C420	A-1B	TL106	A-1G
R118	A-1E	R322	B-2F	R456	A-1A	C102	A-2E	C421	A-1A	TL107	A-2G
R119	A-2E	R323	B-2F	R457	A-1A	C103	A-2E	C422	A-2E	TL108	A-1F
R120	B-1E	R324	B-2G	R458	A-1A	C104	A-2E	C423	A-2E	TL109	A-1F
R121	B-1E	R325	A-2F	R459	B-1A	C105	A-2E	C424	A-2C	TL110	A-1F
R122	A-1E	R326	B-2G	R460	B-1A	C106	A-1E	C425	A-2C	TL401	A-1B
R123	A-1E	R327	B-2G	R461	B-1C	C107	A-2E	C426	A-2C	TL402	A-1B
R124	A-1E	R328	B-2G	R462	A-1A	C108	A-2E	C427	A-2C	TL403	B-2G
R126	B-1F	R329	B-2F	R463	A-1A	C109	A-2E	C428	A-2G	TL404	B-2G
R127	B-2F	R330	B-2G	R464	A-1A	C110	A-2E	C429	A-2G	TL405	B-2G
R128	A-2E	R331	A-2E	R465	A-1C	C111	A-2F	C430	A-2A	TL406	B-2G
R129	A-2F	R332	B-2G	R466	A-1C	C112	A-2F	C432	A-2G	TL407	B-2F
R130	A-2F	R333	B-2G	R467	A-1C	C113	A-1F	C433	A-2G	TL408	B-1G
R131	A-2F	R334	B-2G	R468	A-1C	C114	A-2F	C434	A-2G	TL409	B-1F
R132	A-2F	R335	B-2G	R469	A-1A	C115	A-2F	C435	A-2G	TL410	B-1F
R133	A-2F	R336	A-2G	R470	B-1G	C116	A-2E	C436	A-2G		
R134	A-2F	R337	A-2G	R471	B-1G	C117	A-2E	C437	A-2G		
R135	A-2C	R338	A-2F	R472	B-1G	C118	A-1F	C438	A-1B		

4.12 MDA/DC CIRCUIT BOARD

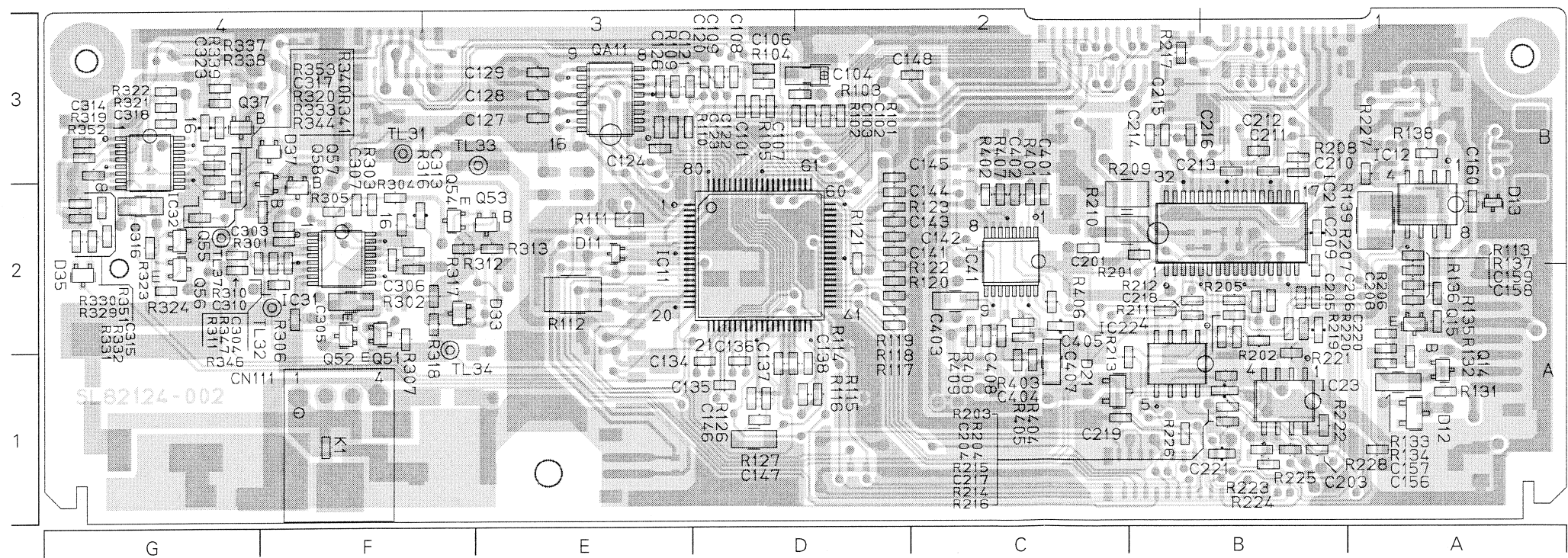
— SIDE A —



● ADDRESS TABLE OF BOARD PARTS
Each address may have an address error by one interval.

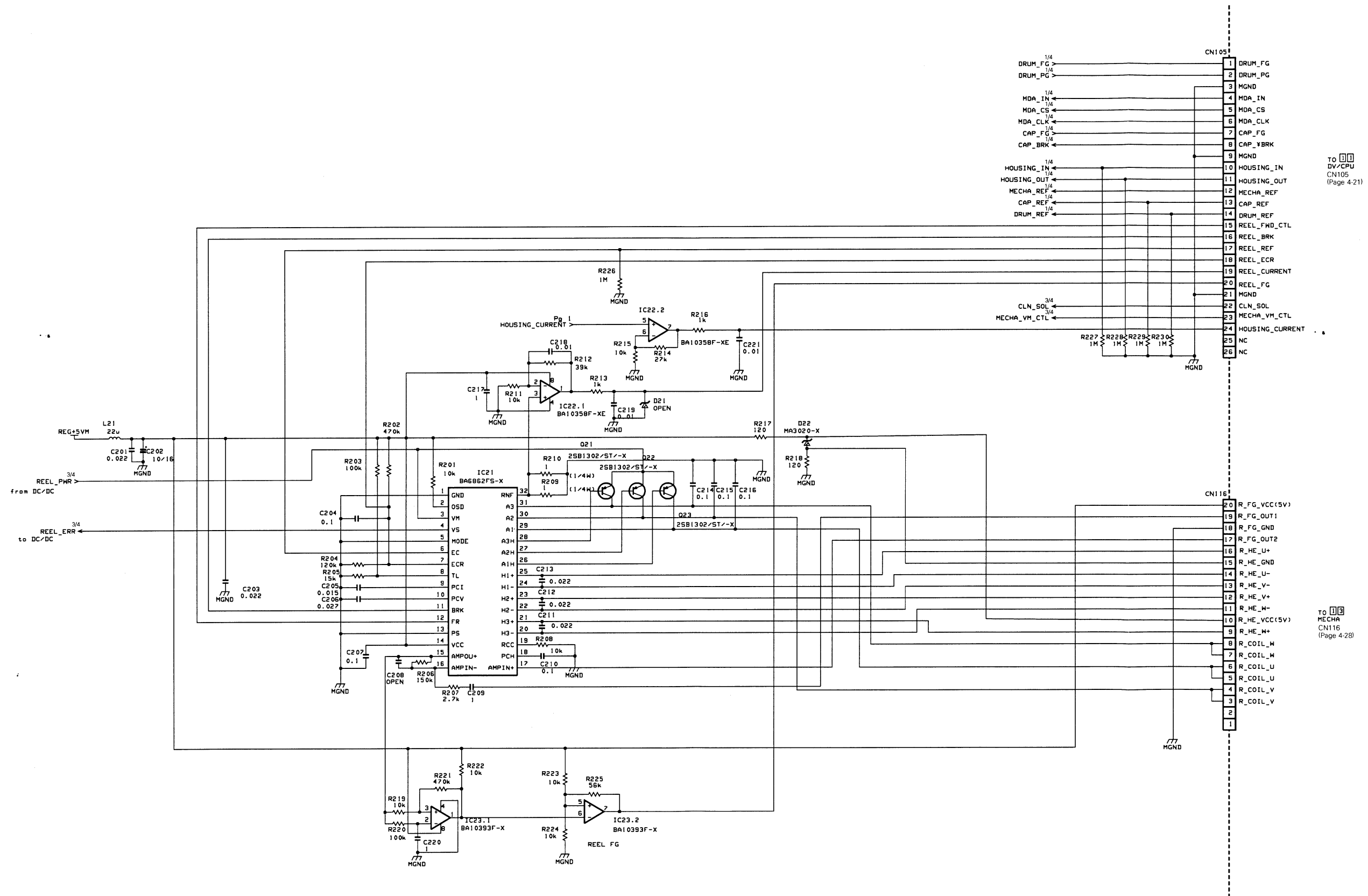
Side		A-1C		Y axis		X axis	
IC11	B-2D	R120	B-2D	R328	A-3G	C142	B-2D
IC12	B-2A	R121	B-2D	R329	B-2G	C143	B-2D
IC21	B-2B	R122	B-2D	R330	B-2G	C144	B-2D
IC22	B-1B	R123	B-2D	R331	B-2G	C145	B-2D
IC23	B-1B	R124	A-3C	R332	B-2G	C146	B-1D
IC31	B-2F	R125	A-3B	R333	B-2G	C147	B-1D
IC32	B-3G	R126	B-1D	R334	B-2F	C148	B-3C
IC41	B-2C	R127	B-1D	R335	A-3F	C149	A-3D
IC42	A-2A	R128	A-1D	R336	A-3F	C156	B-1A
IC43	A-3A	R129	A-3E	R337	B-3G	C157	B-1A
		R130	A-2E	R338	B-3G	C158	B-2A
Q11	A-2E	R131	B-1A	R339	B-3G	C159	B-2A
Q12	A-2E	R132	B-1A	R340	B-3G	C160	B-2A
Q13	A-1E	R133	B-2A	R341	B-2G	C201	B-2C
Q14	B-1A	R134	B-1A	R342	A-2F	C202	A-2C
Q15	B-2A	R135	B-2A	R343	A-2E	C203	B-1B
Q21	A-3B	R136	B-2A	R344	B-2G	C204	B-2B
Q22	A-3B	R137	B-2A	R345	A-2F	C205	B-2B
Q23	A-3B	R138	B-3A	R346	B-2F	C206	B-2B
Q31	A-2F	R139	B-2A	R347	B-2F	C207	A-2B
Q32	A-2F	R201	B-2B	R348	B-2F	C208	B-2B
Q33	A-2G	R202	B-2B	R351	B-2G	C209	B-2B
Q34	A-2G	R203	B-2B	R352	B-3G	C210	B-2B
Q35	A-3G	R204	B-2B	R353	B-3G	C211	B-3B
Q36	A-2F	R205	B-2B	R401	B-2C	C212	B-3B
Q37	B-3G	R206	B-2B	R402	B-2C	C213	B-3B
Q41	A-1C	R207	B-2B	R403	B-2C	C214	B-3B
Q42	A-3C	R208	B-3B	R404	B-1C	C215	B-3B
Q43	A-1C	R209	B-2C	R405	B-1C	C216	B-3B
Q44	A-2C	R210	B-2C	R406	B-2C	C217	B-1B
Q45	A-2C	R211	B-2B	R407	B-2C	C218	B-2B
Q46	A-3C	R212	B-2B	R408	B-2C	C219	B-1C
Q51	B-2F	R213	B-1C	R409	B-2C	C220	B-2B
Q52	B-2F	R214	B-1B	R410	A-2C	C221	B-1B
Q53	B-2E	R215	B-1B	R411	A-2C	C301	A-1G
Q54	B-2F	R216	B-1B	R412	A-2B	C302	A-1F
Q55	B-2G	R217	B-3B	R413	A-2B	C303	B-2F
Q56	B-2G	R218	A-3B	R414	A-2B	C304	B-2F
Q57	B-2F	R219	B-2B	R415	A-2C	C305	B-2F
Q58	B-2F	R220	B-2B	R416	A-2C	C306	B-2F
		R221	B-1B	R417	A-2B	C307	B-2F
D11	B-2E	R222	B-1B	R418	A-2B	C308	A-1F
D12	B-1A	R223	B-1B	R419	A-2B	C309	A-3F
D13	B-2A	R224	B-1B	R420	A-2C	C310	B-2G
D21	B-1C	R225	B-1B	R421	A-3C	C311	A-1F
D22	A-3B	R226	B-1B			C312	A-3F
D31	A-2F	R227	B-2A			C313	B-2F
D32	A-2E	R228	B-1A			C314	B-3G
D33	B-2F	R229	A-1D			C315	B-2G
D34	A-2G	R230	A-1D			C316	B-2G
D35	B-2G	R301	B-2F			C317	B-3G
D36	A-2F	R302	B-2F			C318	B-3G
D37	B-3F	R303	B-2F			C319	A-2G
D41	A-1C	R304	B-2F			C320	A-3G
D42	A-2C	R305	B-2F			C321	A-2F
		R306	B-2F			C322	A-3F
R1	A-3G	R307	B-2F			C323	B-3G
R2	A-3A	R308	A-3F			C324	B-2C
R101	B-3D	R309	A-3F			C325	B-2C
R102	B-3D	R310	B-2G			C326	B-2C
R103	B-3D	R311	B-2G			C327	B-2C
R104	B-3D	R312	B-2F			C328	B-2C
R105	B-3D	R313	B-2E			C329	B-2C
R106	A-3E	R314	A-3F			C330	B-2C
R107	A-3E	R315	A-3F			C331	B-2C
R108	A-3E	R316	B-2F			C332	B-2C
R109	B-3E	R317	B-2F			C333	B-2C
R110	B-3E	R318	B-2F			C334	B-2C
R111	B-2E	R319	B-3G			C335	B-2C
R112	B-2E	R320	B-2G			C336	B-2C
R113	B-2A	R321	B-3G			C337	B-2C
R114	B-1D	R322	B-3G			C338	B-2C
R115	B-1D	R323	B-2G			C339	B-2C
R116	B-1D	R324	B-2G			C340	B-2C
R117	B-2D	R325	A-3G			C341	A-1D
R118	B-2D	R326	A-3G			C342	A-2D
R119	B-2D	R327	A-2G			C343	A-2D

— SIDE B —



TO
MECHA CONN
CN112
(Page 4-28)

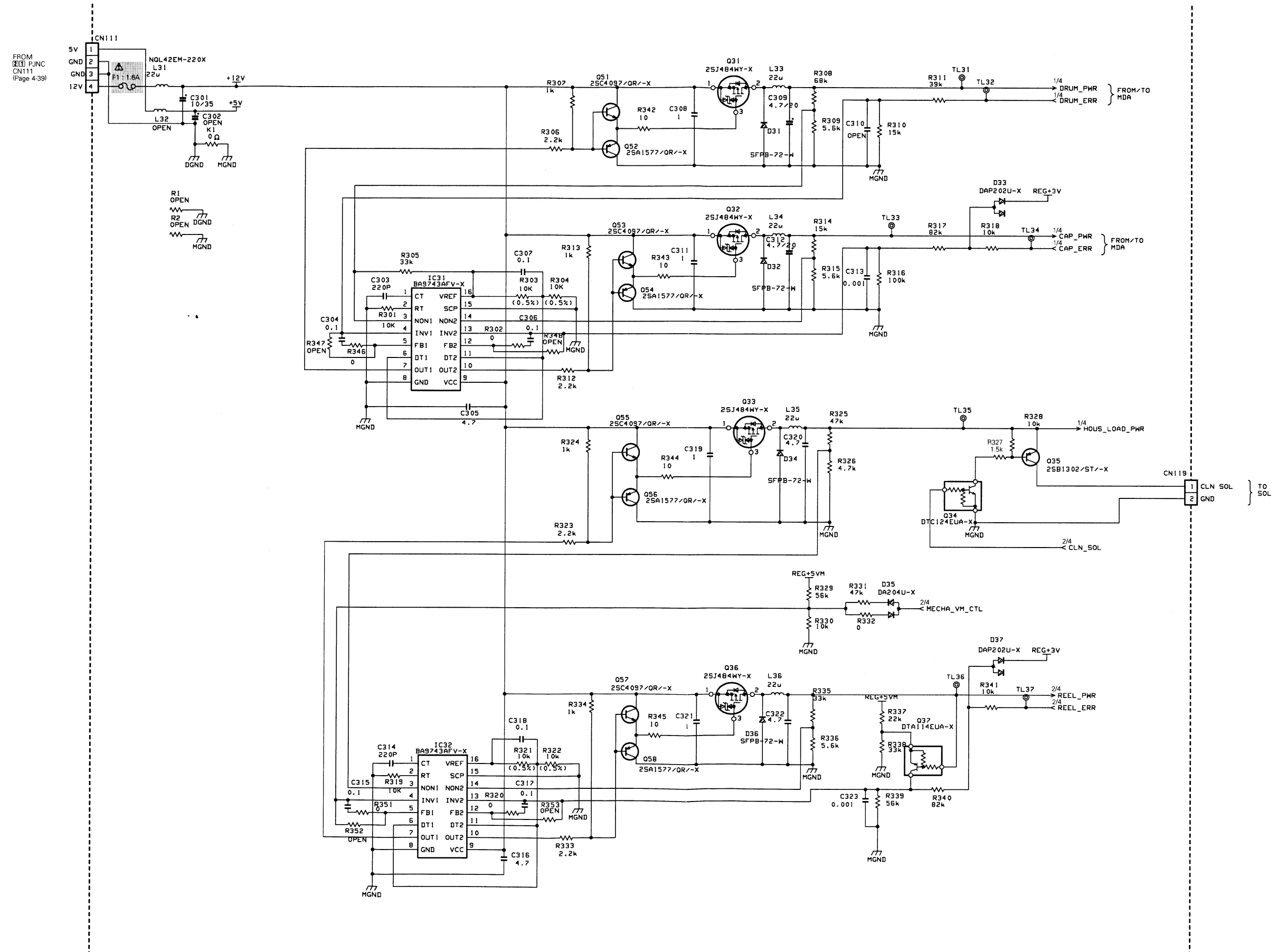


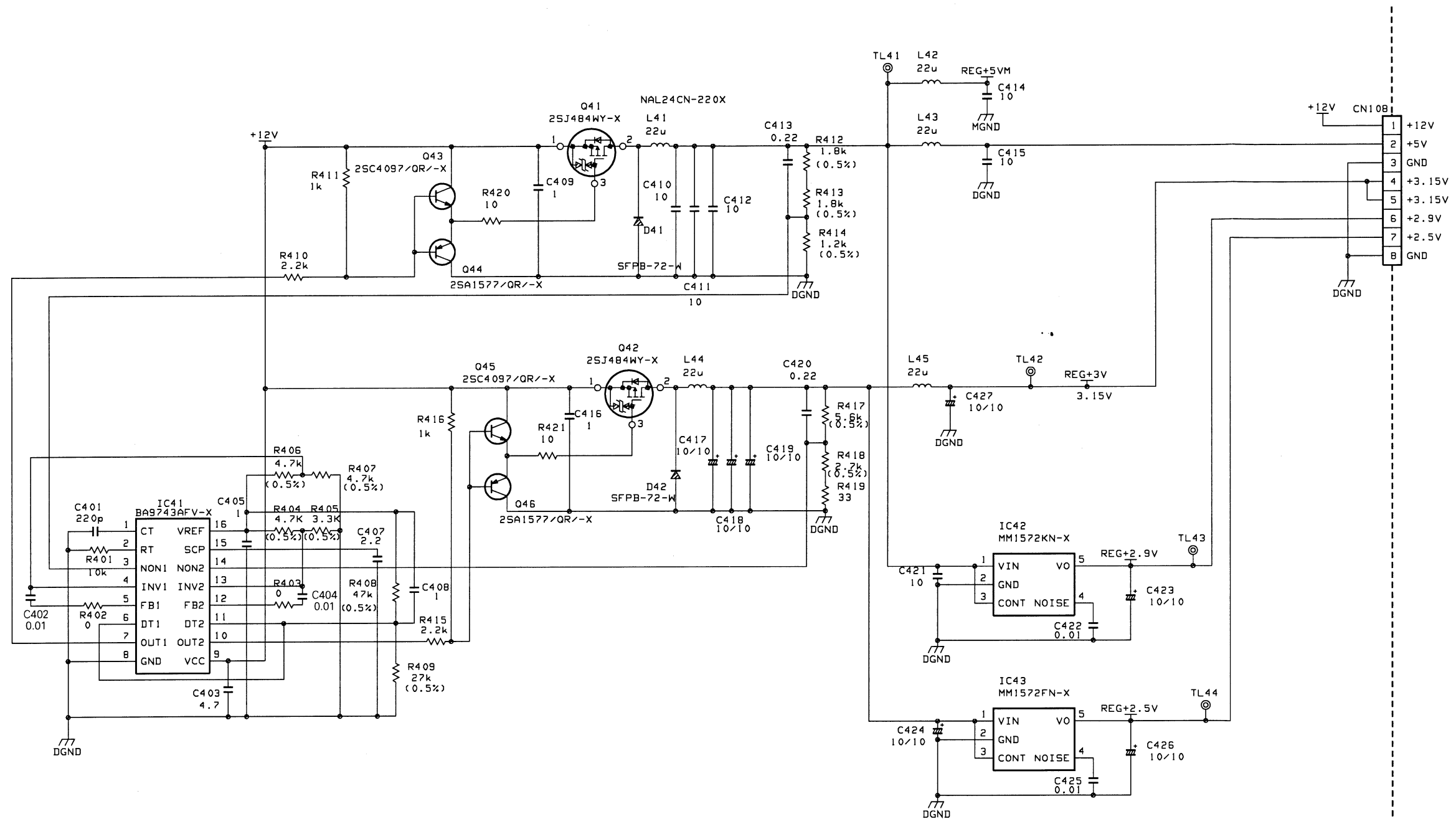


TO 111
DV/CPU
CN105
(Page 4-21)

TO 113
MECHA
CN116
(Page 4-28)

— MDA/DC SCHEMATIC DIAGRAM 3/4 —





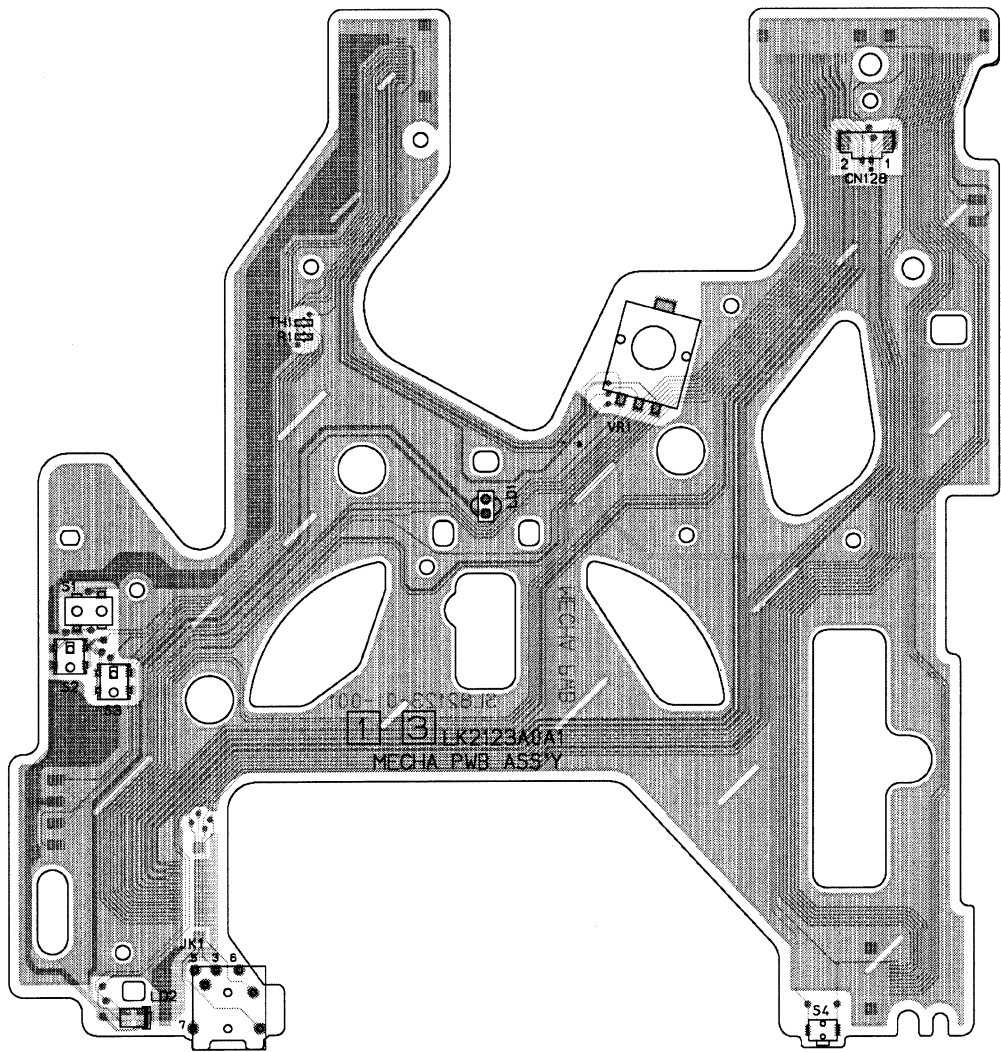
TO 11
DV/CPU
CN108
(Page 4-21)

[illegible]

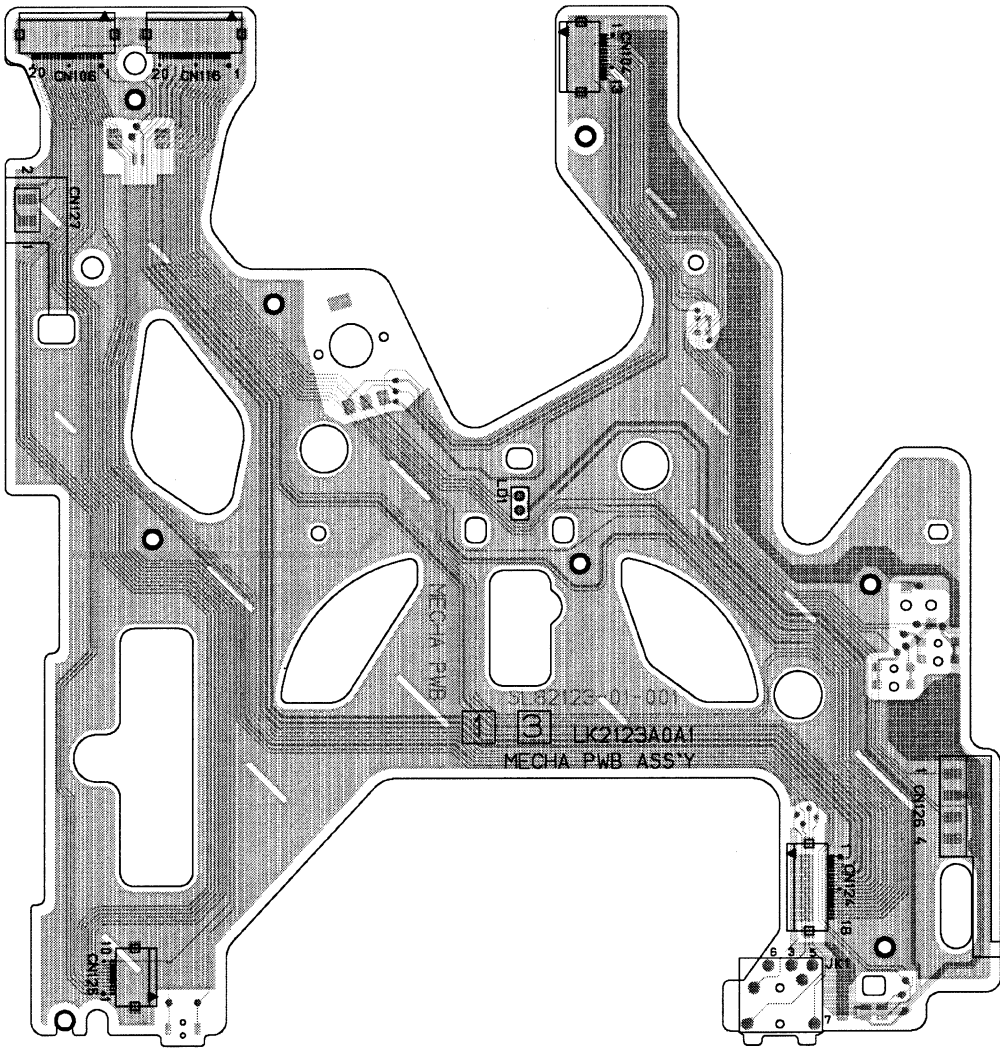
4.15 MECHA & MECHA CONN CIRCUIT BOARDS

— MECHA CIRCUIT BOARD —

— SIDE A —

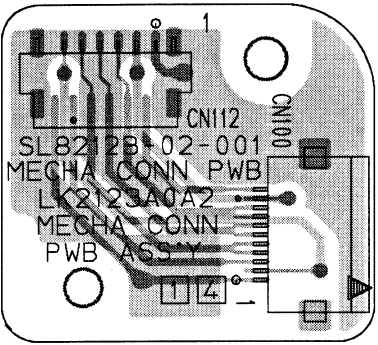


— SIDE B —

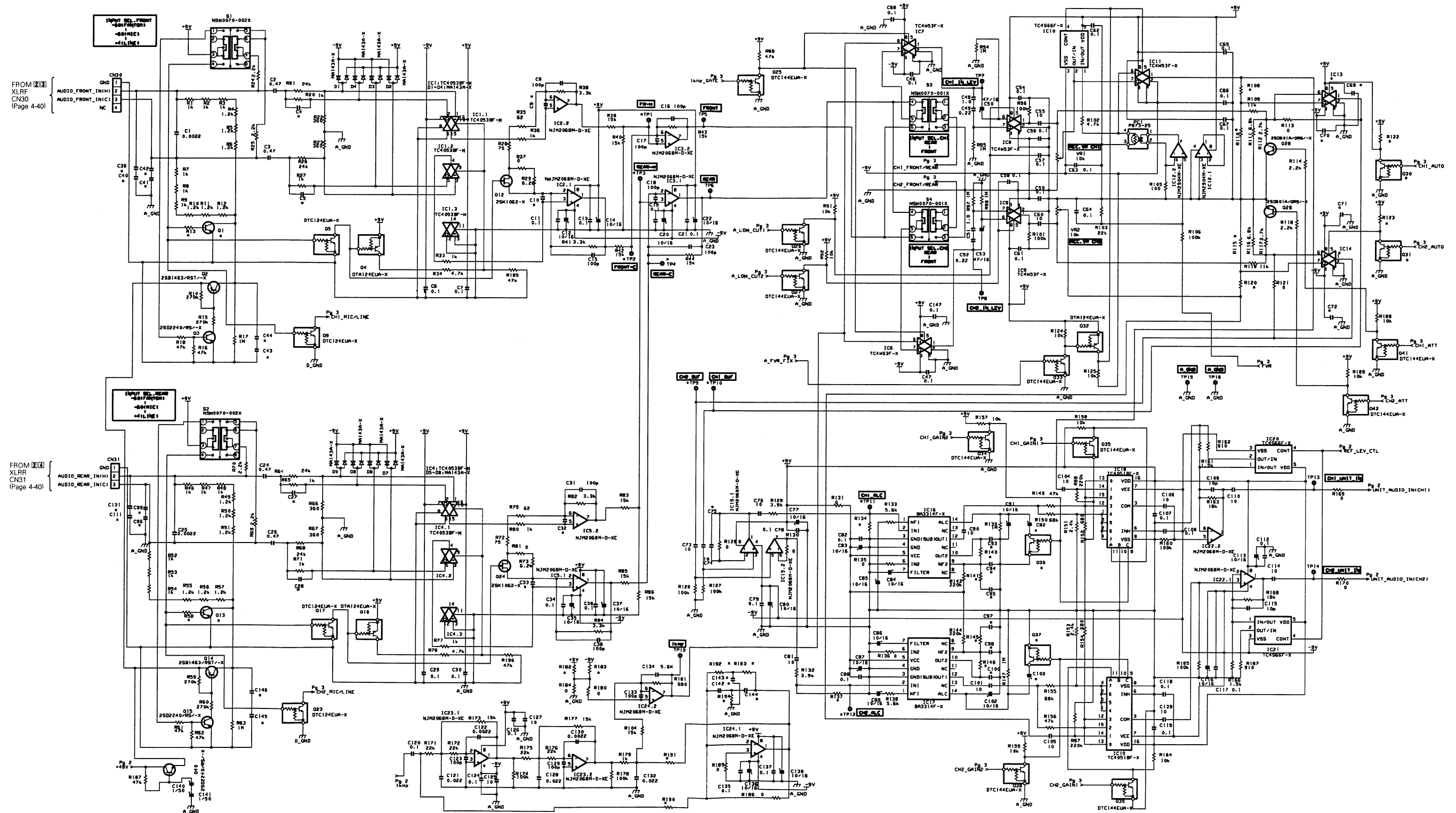


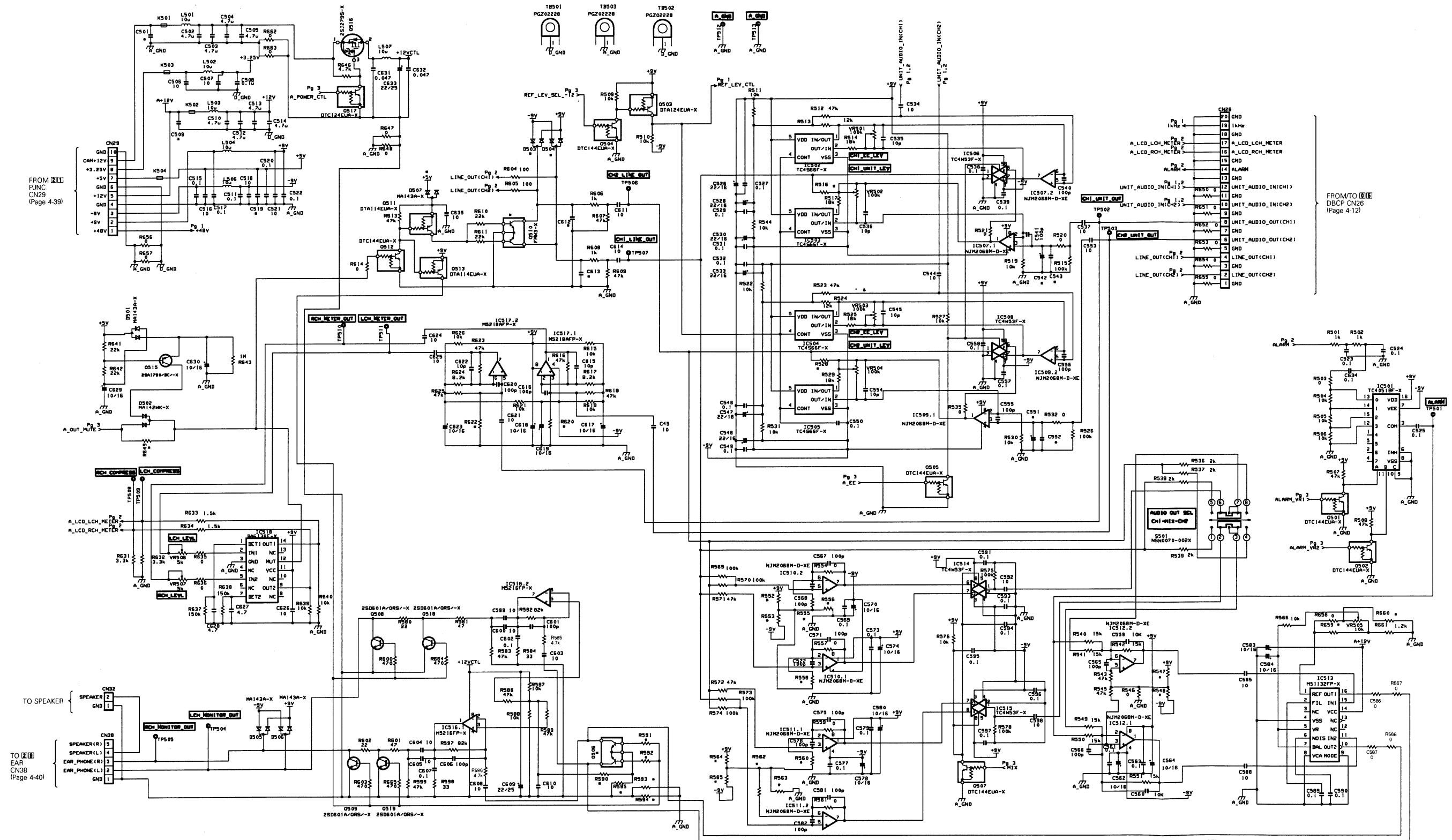
— MECHA CONN CIRCUIT BOARD —

— SIDE A —

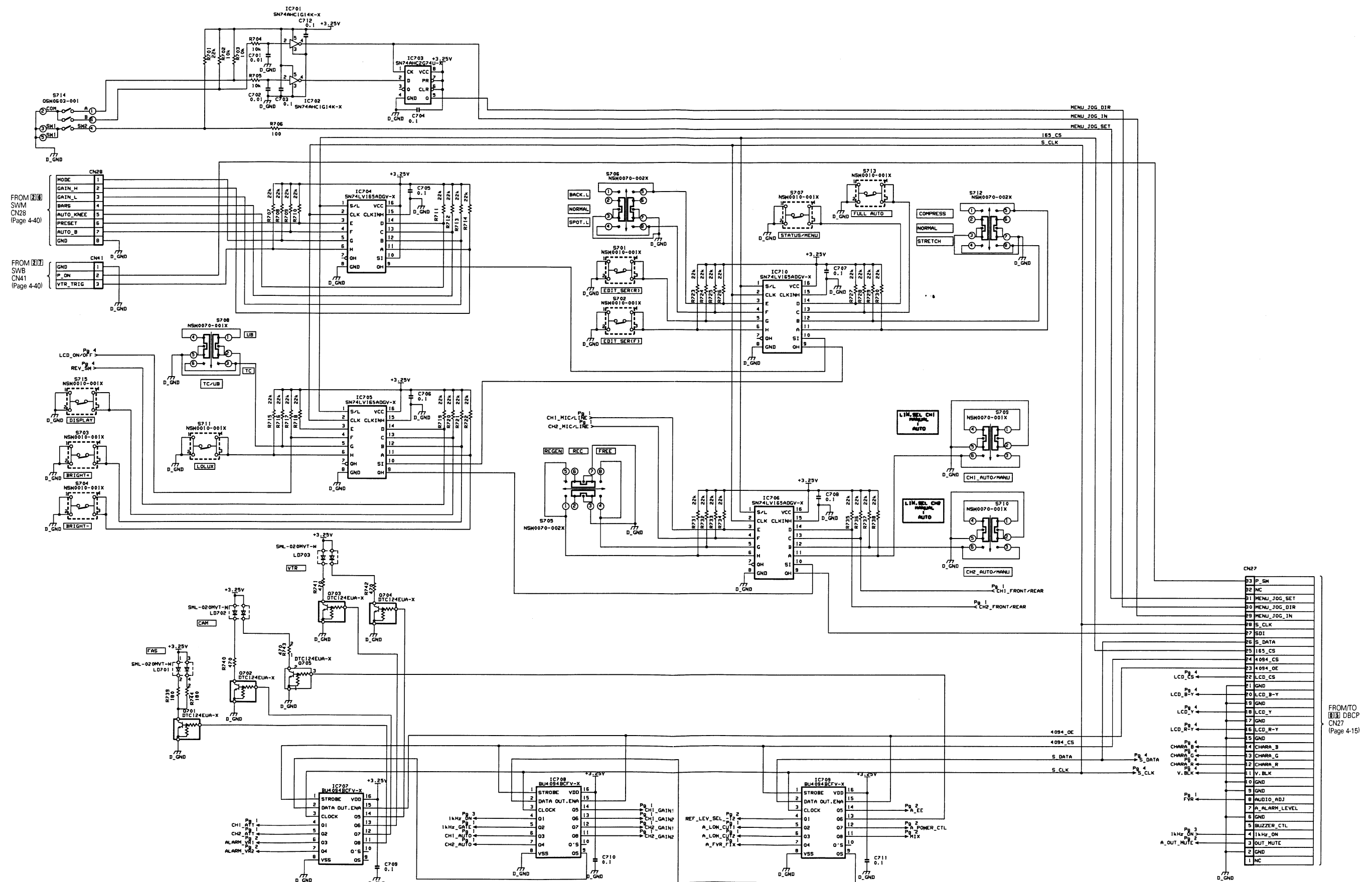


4.16 ALS SCHEMATIC DIAGRAM 1/4

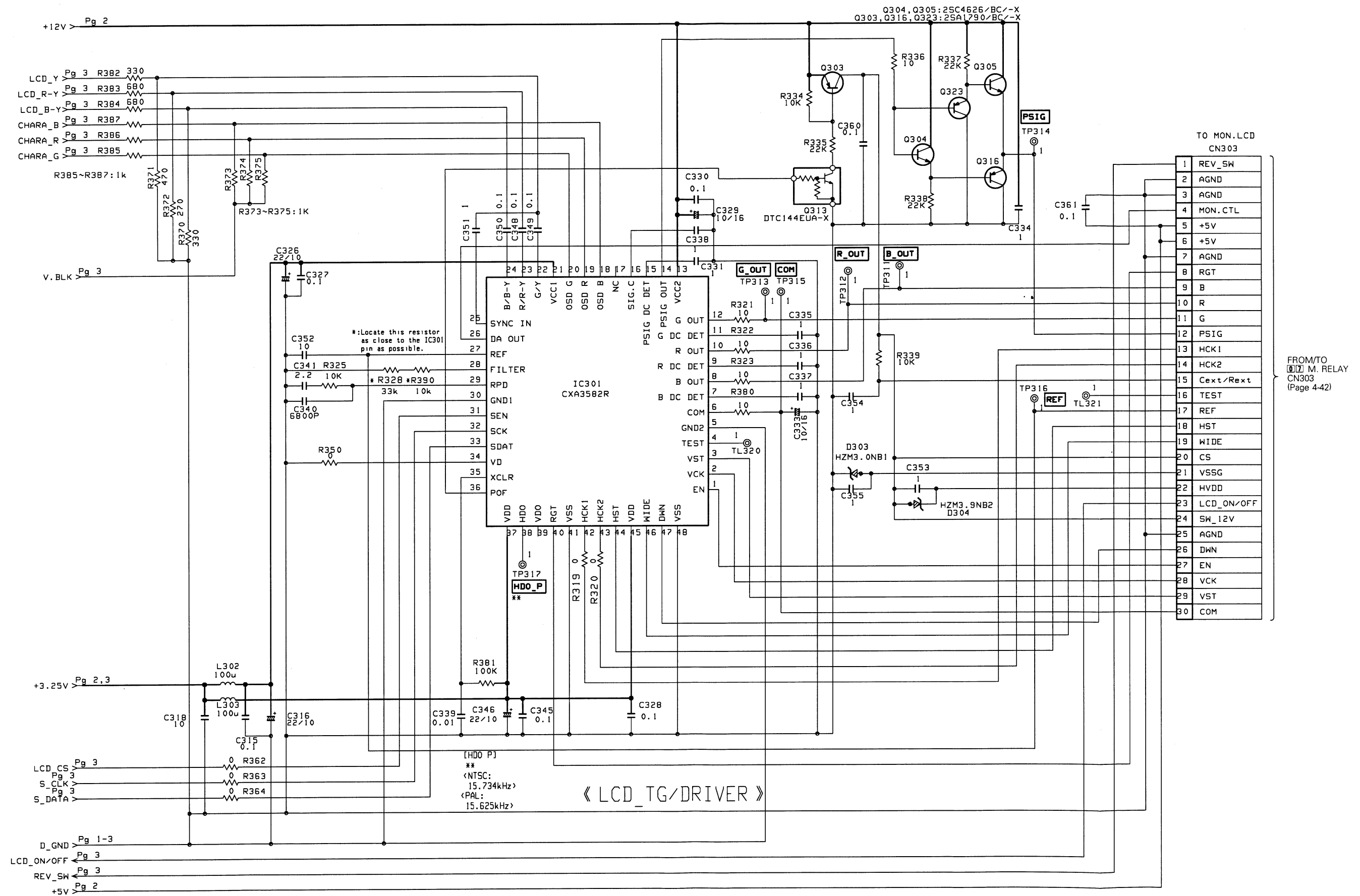




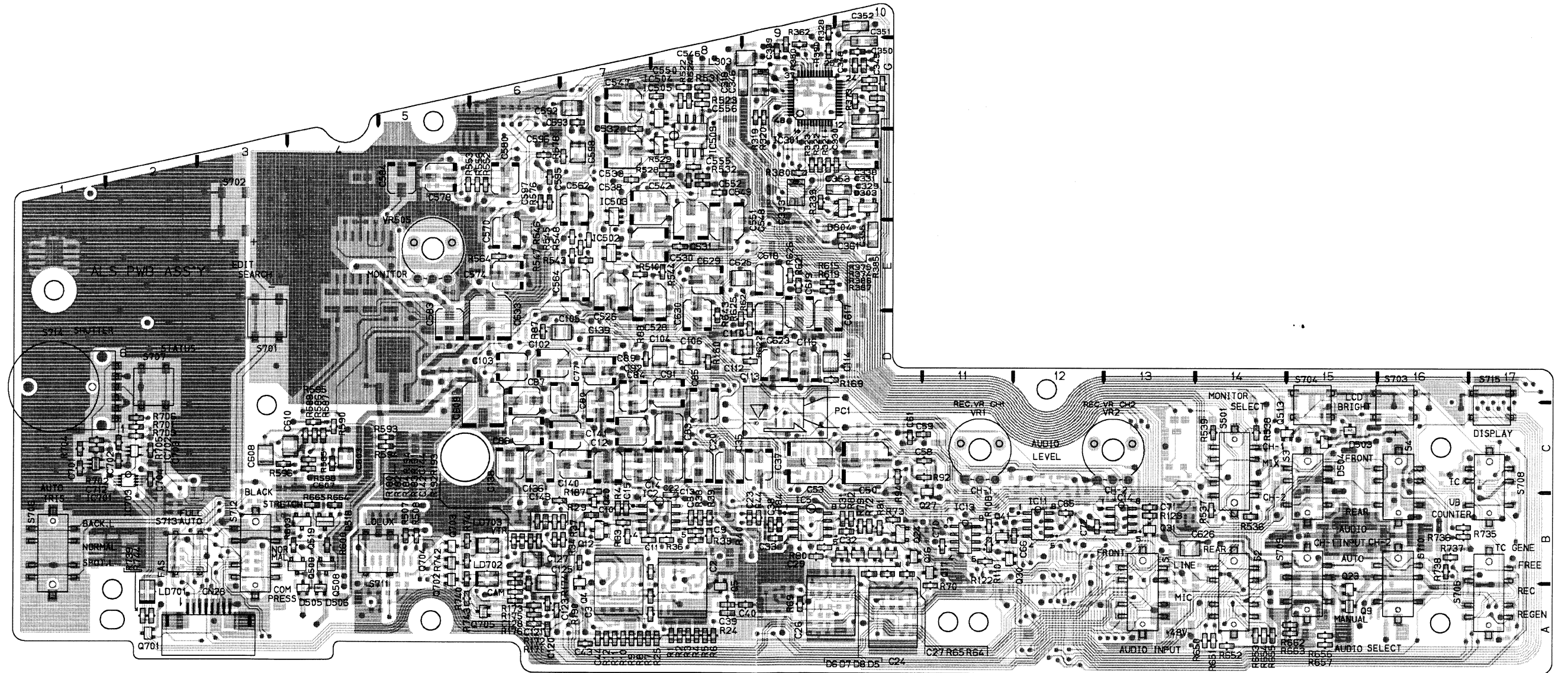
— ALS SCHEMATIC DIAGRAM 3/4 —



— ALS SCHEMATIC DIAGRAM 4/4 —



— SIDE A —



● ADDRESS TABLE OF BOARD PARTS

Each address may have an address error by one interval.

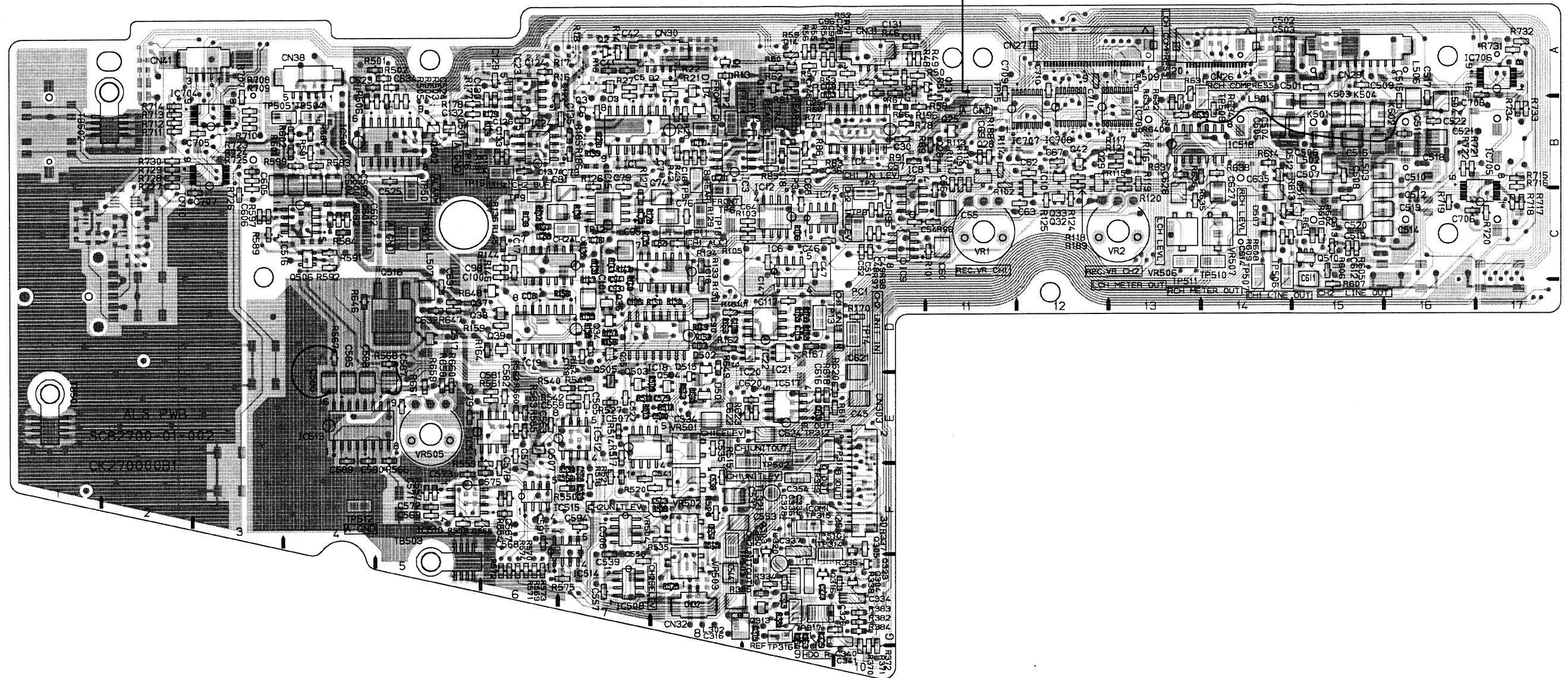
Side A-1C

Y axis

X axis

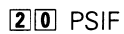
IC1	B-8B	IC505	A-8F	Q5	A-9A	Q304	B-10F	Q908	A-12F	R6	A-9A	R39	A-9B	R69	A-10A	R105	B-9C	R135	B-8C	R166	B-10C	R195	B-7B	R384	B-10G	R526	B-9E	R557	B-5E	R588	A-4C	R618	B-10D	R653	A-15A		
IC2	A-8B	IC506	B-8F	Q9	A-16A	Q305	B-10F	Q909	A-12E	R7	A-8A	R40	A-9B	R70	A-11A	R106	B-10C	R136	B-6C	R167	B-10D	R196	B-11A	R385	A-11F	R527	B-7D	R558	B-6E	R589	B-8C	R619	A-10D	R654	A-15A		
IC3	B-9B	IC507	B-8E	Q12	A-7B	Q313	B-9F	Q910	A-12E	R8	A-8A	R41	A-8B	R71	B-10A	R108	A-12B	R137	B-7C	R168	B-10D	R199	A-9F	R386	A-11F	R528	A-8E	R559	B-6E	R590	A-4C	R620	B-10D	R655	A-15A		
IC4	B-10B	IC508	B-8F	Q13	B-11A	Q316	B-10F	Q911	A-13E	R9	A-8A	R42	B-8B	R72	A-10B	R109	B-11B	R138	B-7C	R169	A-10C	R320	A-9F	R387	A-11F	R529	A-8E	R560	B-6E	R591	B-4C	R621	A-10D	R656	A-16A		
IC5	A-10B	IC509	A-8F	Q14	B-10A	Q323	B-10F	Q912	A-13F	R10	A-8A	R43	B-8B	R73	A-11B	R110	A-12B	R139	B-8C	R170	B-10C	R321	A-10E	R390	A-10G	R530	A-8E	R561	B-6D	R592	B-4C	R622	A-9D	R657	A-16A		
IC6	B-9C	IC510	B-6E	Q15	B-9A	Q501	B-6B			R11	A-7A	R44	A-9B	R77	B-10B	R111	B-11B	R140	B-8C	R171	A-7A	R322	A-10E	R501	A-5A	R531	A-8F	R562	B-6D	R593	A-5C	R623	B-9D	R658	B-5D		
IC7	B-10C	IC511	B-6E	Q16	A-11B	Q502	B-5B	D1	B-8A	R12	A-7A	R46	B-11A	R78	B-11B	R112	B-12B	R141	B-7C	R172	A-7A	R323	A-10E	R502	B-5A	R532	A-8E	R563	B-6D	R594	A-5C	R624	A-9D	R659	B-5D		
IC8	B-11B	IC512	B-7E	Q17	A-11A	Q503	B-8D	D2	B-8A	R13	B-9A	R47	B-11A	R79	A-10B	R113	B-11B	R142	B-8C	R173	A-6A	R325	B-10G	R503	B-5A	R535	B-8F	R564	A-6E	R595	A-4C	R625	A-9D	R660	B-6D		
IC9	B-11C	IC513	B-5E	Q23	A-16A	Q504	B-8D	D3	B-7A	R14	B-8A	R48	B-11A	R80	A-10B	R114	B-12B	R144	B-6C	R174	A-6A	R328	A-10G	R504	B-5A	R536	A-15B	R565	B-6E	R596	A-4C	R626	A-10D	R661	B-5D		
IC10	B-12B	IC514	B-7F	Q24	A-11B	Q505	B-7D	D4	B-8A	R15	B-7A	R49	B-11A	R81	A-11B	R115	B-13B	R145	B-6C	R175	A-6A	R334	B-9F	R505	B-5A	R537	A-14B	R566	B-5E	R597	B-3B	R631	B-14A	R662	A-15A		
IC11	A-12B	IC515	B-7E	Q25	B-11B	Q506	B-4C	D5	A-11B	R16	B-7A	R50	B-11A	R82	A-10B	R116	B-13B	R146	B-6C	R176	A-6A	R335	B-9F	R506	B-5A	R538	A-15C	R567	B-4D	R598	A-4C	R632	B-14A	R663	A-15A		
IC12	B-9C	IC516	B-4C	Q26	B-11B	Q507	B-7E	D6	A-10B	R17	B-7A	R51	B-11A	R83	B-10B	R117	B-13B	R147	B-7C	R177	B-6A	R336	B-10F	R507	A-5B	R539	A-14C	R568	B-5D	R599	B-4B	R633	B-14A	R664	A-4B		
IC13	A-12B	IC517	B-9D	Q27	A-11B	Q508	A-4B	D7	A-10B	R18	B-7A	R52	B-10A	R84	A-9B	R118	B-13B	R149	B-8D	R178	B-6A	R337	B-10F	R508	A-5B	R540	B-7D	R569	B-7F	R600	A-4B	R634	B-14B	R665	A-4B		
IC14	A-13B	IC518	B-14B	Q28	B-12B	Q509	A-4B	D8	A-10B	R20	B-8B	R53	B-10A	R85	B-9B	R119	B-13B	R150	B-8C	R179	B-6B	R338	B-10F	R509	B-8D	R541	B-7D	R570	B-6F	R601	B-4B	R635	B-14B	R701	A-2C		
IC15	B-7B	IC701	A-1C	Q29	B-13B	Q510	B-15C	D303	A-10E	R21	B-8A	R54	B-10A	R86	B-10B	R120	B-13B	R151	B-8C	R180	A-6B	R339	A-10E	R510	A-8D	R542	B-7D	R571	B-6F	R602	B-4B	R636	B-14B	R702	A-1C		
IC16	B-8C	IC702	A-2C	Q30	A-12B	Q511	B-15C	D304	A-10E	R22	B-8A	R55	B-10A	R87	A-7D	R121	B-13B	R152	B-8D	R181	B-6B	R350	A-9G	R511	B-8D	R543	A-7E	R572	B-6F	R603	A-4B	R637	B-14B	R703	A-2C		
IC17	B-7C	IC703	A-2B	Q31	A-14B	Q512	B-15B	D501	B-8D	R23	A-8A	R56	B-10A	R88	A-8D	R122	A-12B	R153	B-7C	R182	A-6B	R362	A-10G	R512	B-8D	R544	A-8D	R573	B-7F	R604	B-16C	R638	B-14B	R704	A-1C		
IC18	B-8D	IC704	B-3B	Q32	B-13B	Q513	A-15C	D502	B-9D	R24	A-9A	R57	B-10A	R89	B-11B	R123	A-14B	R154	B-7D	R183	A-7B	R363	B-10G	R513	B-8D	R545	A-7E	R574	B-6F	R605	B-16C	R639	B-14B	R705	A-2C		
IC19	B-7D	IC705	B-17B	Q33	B-13B	Q515	B-8D	D503	A-16C	R25	A-8A	R58	B-11A	R91	B-11B	R124	B-13B	R155	B-7C	R184	A-7B	R364	B-10G	R514	B-8E	R546	A-7E	R575	B-7F	R606	B-16C	R640	B-14B	R706	A-2C		
IC20	B-9D	IC706	B-18A	Q34	B-7D	Q516	B-5C	D504	A-16C	R26	A-8A	R59	B-9A	R92	A-11B	R125	B-12B	R156	B-7D	R185	B-7B	R370	B-10G	R515	B-9E	R547	A-7E	R576	A-7E	R607	B-16C	R641	B-8D	R707	B-3A		
IC21	B-9D	IC707	B-12A	Q35	B-7D	Q517	B-5D	D505	A-4A	R27	B-8A	R60	B-9A	R94	A-11B	R126	B-7B	R157	B-7D	R186	B-7B	R371	B-10G	R516	B-7E	R548	A-7E	R578	A-7F	R608	B-15C	R642	B-8D	R708	B-3A		
IC22	B-9D	IC708	B-13A	Q36	B-7C	Q518	A-4B	D506	A-4A	R28	B-7B	R61	B-9A	R95	B-11B	R127	B-8B	R158	B-7D	R187	A-7B	R372	B-10G	R517	B-8E	R549	B-7E	R580	B-4B	R609	B-15C	R643	A-9D	R709	B-3B		
IC23	B-6A	IC709	B-13A	Q37	B-6C	Q519	A-4B	D507	B-15C	R29	A-7B	R62	B-9A	R96	B-11C	R128	B-8C	R159	B-6D	R188	B-12B	R373	A-10F	R519	B-8E	R550	B-7E	R581	B-4B	R610	B-15C	R646	B-5C	R710	B-3B		
IC24	B-7B	IC710	B-3B	Q38	B-6C	Q701	A-2A			R33	A-8B	R63	B-10A	R97	B-10C	R129	B-8C	R160	A-9D	R189	B-13B	R374	A-10F	R520	B-8E	R551	B-7E	R582	B-4C	R611	B-15C	R647	B-6C	R711	B-2B		
IC301	A-10F			Q39	B-6D	Q702	A-6A		R1	A-8A	R34	A-7B		R64	A-11A	R98	B-11C	R130	B-7B	R161	B-9C	R190	A-7A	R375	A-10F	R521	B-8E	R552	A-6E	R583	B-4B	R613	B-15B	R648	B-6C	R712	B-2B
IC501	B-5B	Q1	B-9A	Q40	A-7B	Q703	A-6B		R2	A-8A	R35	A-8B		R65	A-11A	R101	B-11C	R131	B-7C	R162	B-9D	R191	A-7B	R380	A-10E	R522	A-8F	R553	A-6E	R584	B-4C	R614	B-15B	R649	B-9D	R713	B-2B
IC502	A-7E	Q2	B-7A	Q41	A-12B	Q704	A-6B		R3	A-8A	R36	A-8B		R66	B-11A	R102	B-12B	R132	B-7B	R163	B-9D	R192	A-7B	R381	B-9F	R523	A-8F	R554	B-6E	R585	A-4C	R615	A-10D	R650	A-14A	R714	B-2A
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IC504	A-8F	Q4	A-7A	Q303	B-9F	Q907	A-12F		R5	A-9A	R38	A-8B		R68	B-10A	R104	B-6B	R134	B-8C	R165	B-10C	R194	A-7B	R383	B-10F	R525	B-8F	R556	A-6E	R587	A-4C	R617	B-10D	R652	A-15A	R716	B-18B

- SIDE B -



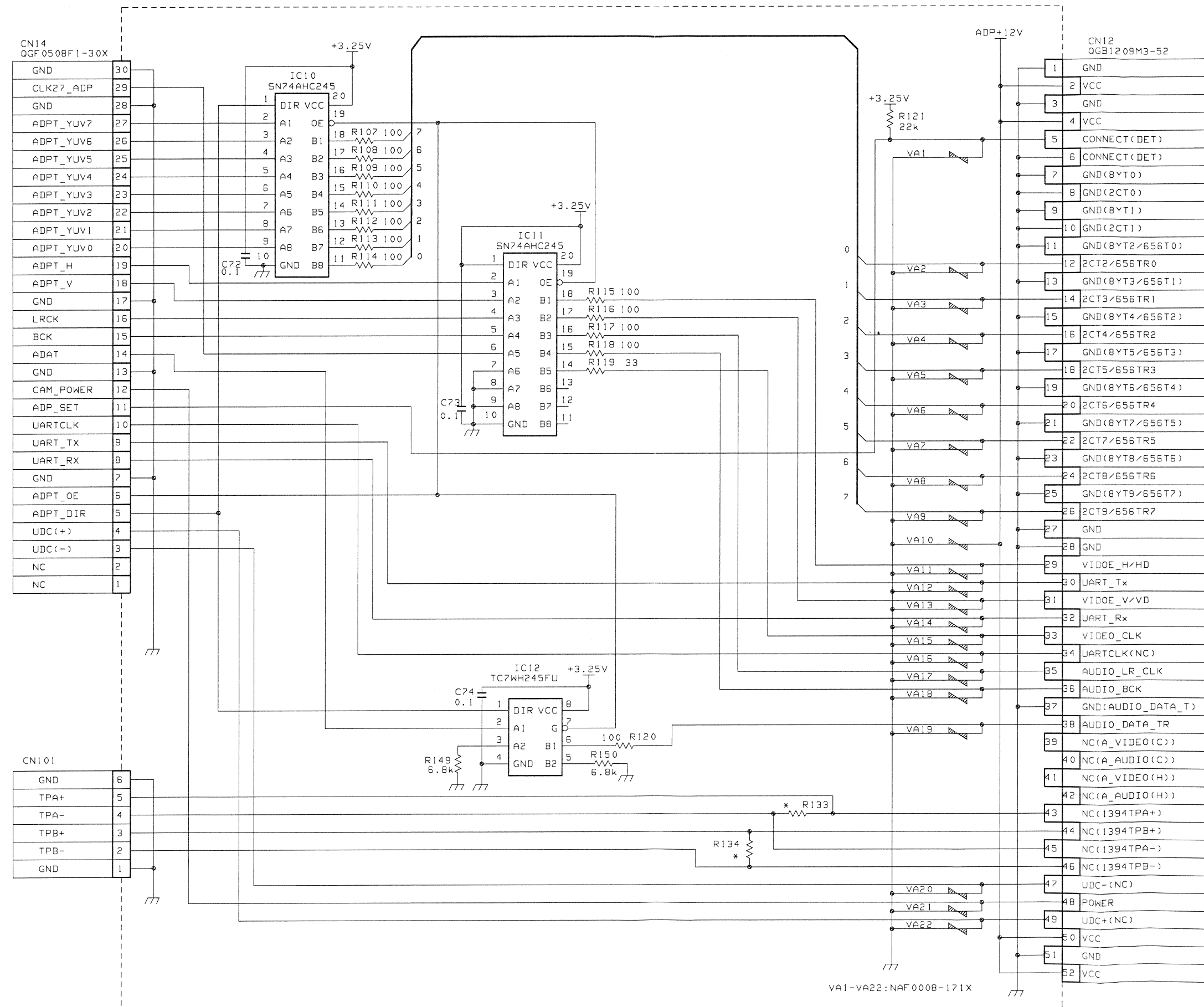
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R719	B-17B	R943	A-12E	C11	A-8B	C40	A-9A	C69	B-12B	C98	B-6C	C127	A-7B	C331	A-10F	C508	B-16B	C537	B-9E	C566	B-7E	C595	A-7E	C624	B-9E	C963	A-13F	TP19	B-6B	CN32	B-8F	S715	A-18C		
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R723	B-3B	R947	A-13F	C15	A-8B	C44	A-7A	C73	B-7B	C102	A-7D	C131	B-11A	C336	B-10F	C512	B-16B	C541	B-8E	C570	A-6E	C599	B-4B	C628	B-14B	C967	A-14D	TP314	B-10F	CN303	B-10E	K502	B-16B		
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R726	B-3B	R950	A-13E	C18	B-9B	C47	B-10C	C76	B-8C	C105	A-7D	C134	B-6B	C339	A-9G	C515	B-16A	C544	B-9F	C573	B-6E	C602	B-4C	C631	B-5C	LD702	A-6A	TP317	B-10F	CN911	A-17E				
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R729	B-2B	VR2	A-13C	C21	B-9B	C50	A-10C	C79	B-8B	C108	B-8C	C137	B-6B	C345	B-9F	C518	B-17B	C547	A-8F	C576	B-6E	C605	B-4B	C634	B-5A	TP504	B-4B	TP505	B-4B	S2	A-15A	TS503	B-5F		
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R737	A-17B			C29	A-10B	C58	A-11C	C87	A-6C	C116	A-10C	C145	B-10A	C354	B-10E	C526	A-7D	C555	A-8E	C584	A-5E	C613	B-16C	C707	B-3B	TP7	B-10B	TP513	B-5C	S705	A-18A	L504	B-17A		
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R740	A-6A	C3	A-8A	C32	A-10B	C61	A-11C	C90	B-8C	C119	B-6D	C148	B-9C	C361	A-10E	C529	B-8D	C558	B-8F	C587	B-5D	C616	B-10D	C710	B-12A	TP10	B-8C	CN1	A-1G	S708	A-18B	L907	A-12E		
R741	A-6B	C4	B-8B	C33	A-9B	C62	B-12B	C91	A-8C	C120	A-7A	C149	B-9F	C362	B-15A	C530	A-8E	C559	B-7D	C588	B-5D	C617	A-10D	C711	B-13A	TP11	B-8C	CN2	A-1H	S709	A-16A	L908	A-13E		
R742	A-6B	C5	B-8A	C34	B-9B	C63	B-12B	C92	A-8C	C121	A-7A	C150	B-9F	C363	B-15A	C531	A-8E	C560	B-7E	C589	B-4E	C618	A-9D	C712	A-1C	TP12	B-7C	CN3	A-1H	S710	A-17A				
R743	A-6A	C6	B-7B	C35	A-9C	C64	B-9C	C93	B-7C	C122	B-7A	C151	B-10F	C364	B-15B	C532	A-8F	C561	B-7E	C590	B-5E	C619	A-10D	C958	A-12F	TP13	B-10C	CN4	A-1H	S711	A-5B	PC1	A-9C		
R744	A-2A	C7	B-8B	C36	B-10B	C65	A-13B	C94	B-7C	C123	A-7A	C152	B-10F	C365	B-15B	C533	A-8F	C562	A-7E	C591	B-7F	C620	B-9D	C959	A-12F	TP14	B-10D	CN5	A-1H	S712	A-3B				
R901	A-14D	C8	A-8B	C37	A-9C	C66	A-12B	C95	B-8C	C124	B-7A	C153	B-9F	C366	B-15B	C534	B-9D	C563	B-7E	C592	A-7F	C621	B-10D	C960	A-12F	TP15	B-10D	CN6	A-1H						

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21 PJNC
CN18
(Page 4-39)



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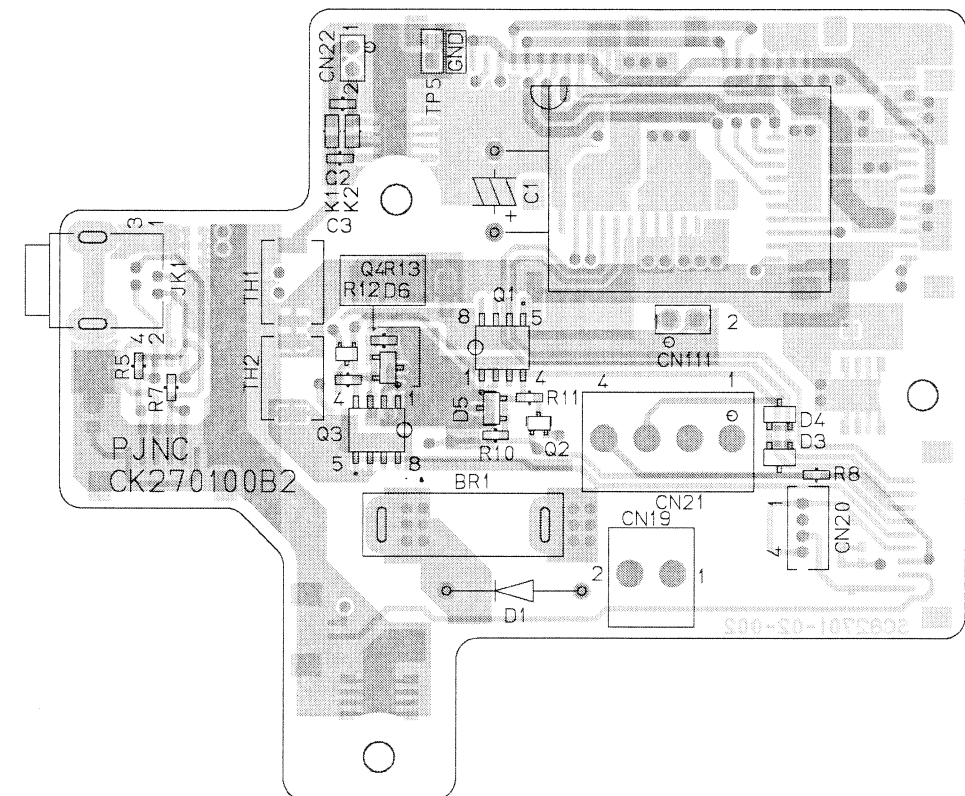
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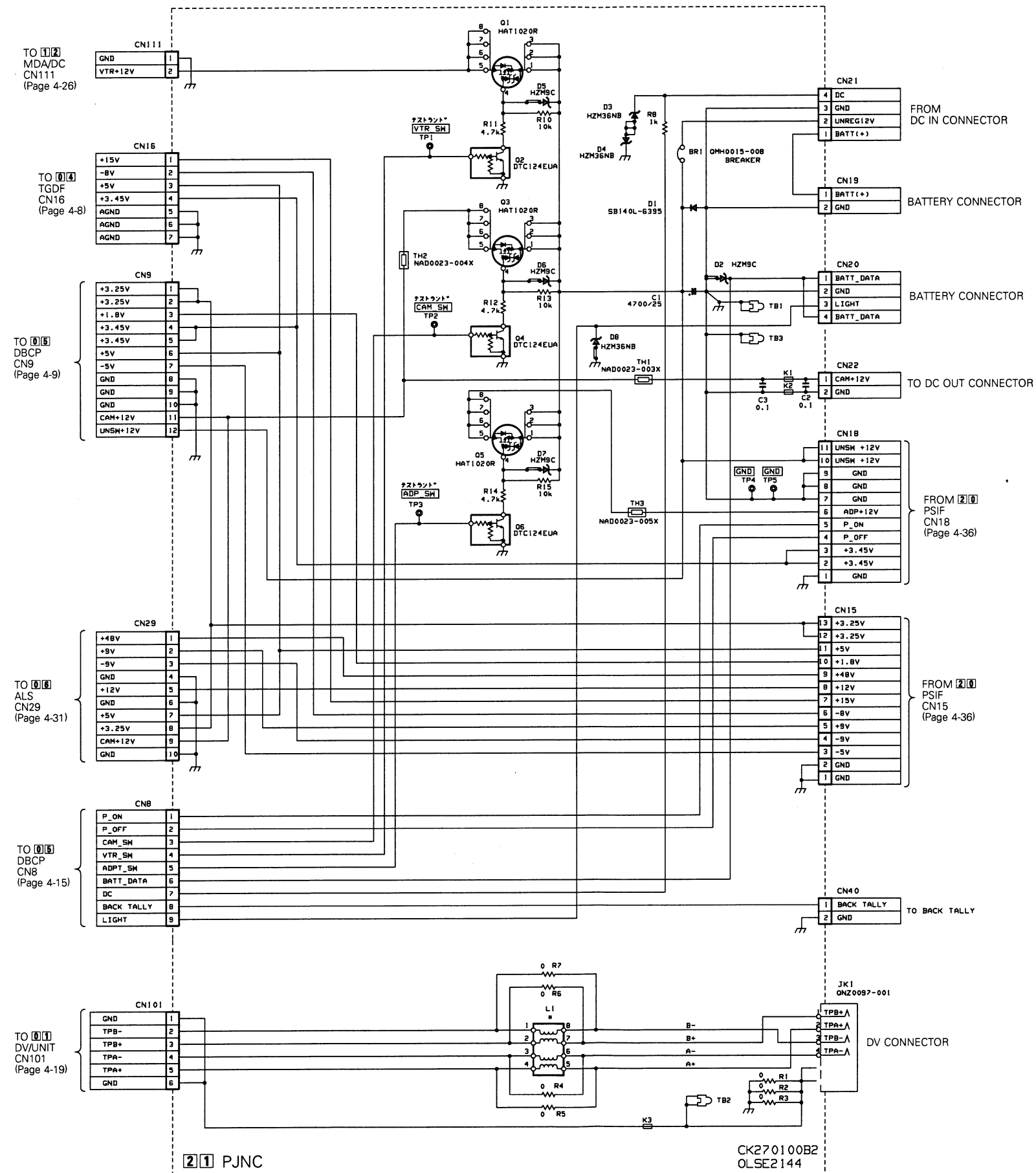
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(Option)

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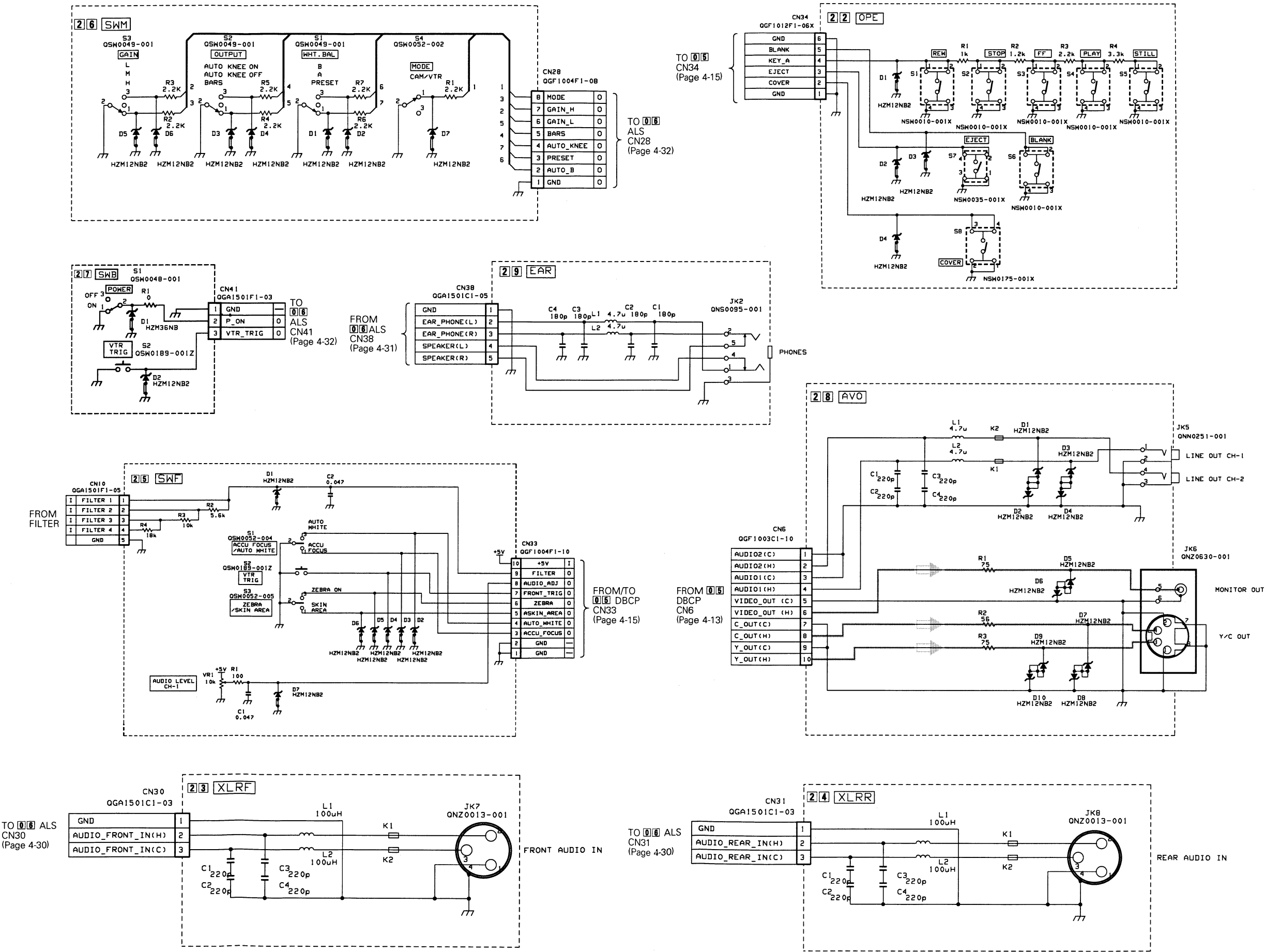
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4.20 PJNC SCHEMATIC DIAGRAM

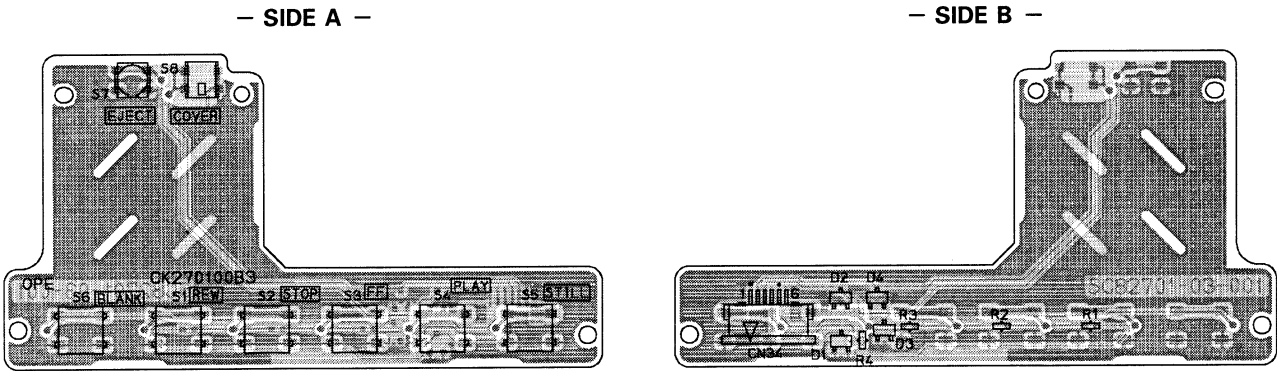


4.21 OPE, SWM, SWB, SWF, EAR, AVO, XLRF & XLRR SCHEMATIC DIAGRAMS

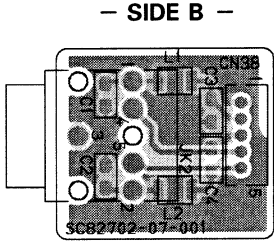


4.22 OPE, SWM, SWB, SWF, EAR, AVO, XLRF & XLRR CIRCUIT BOARDS

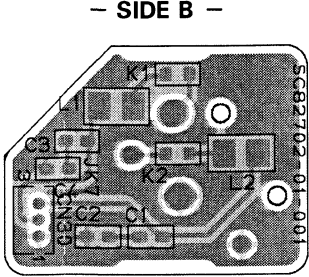
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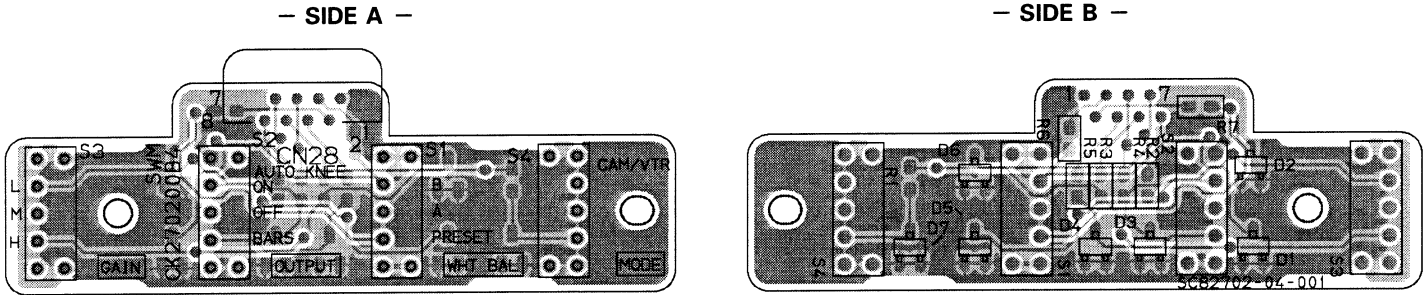
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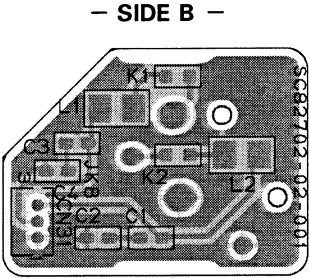
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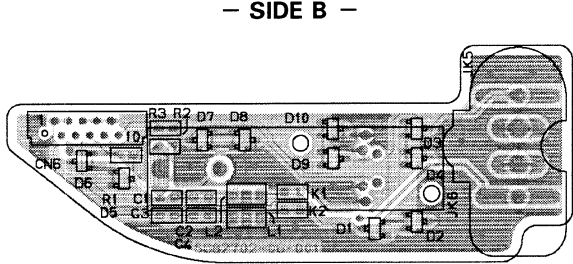
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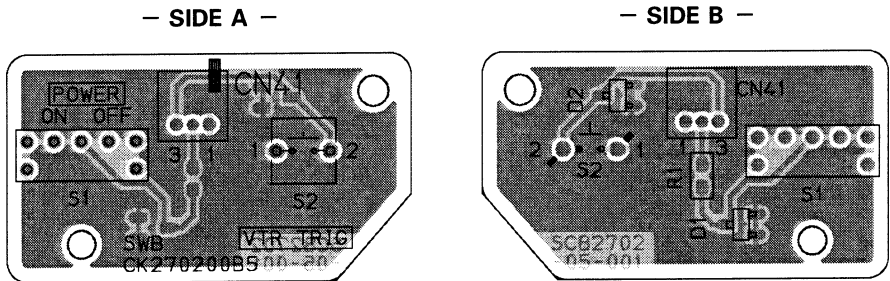
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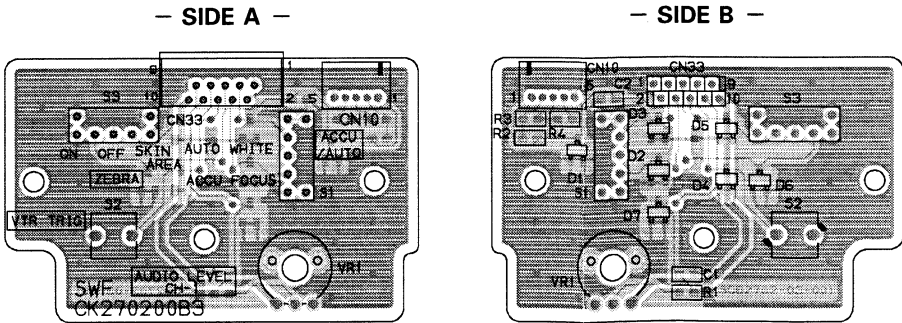
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— SWB —



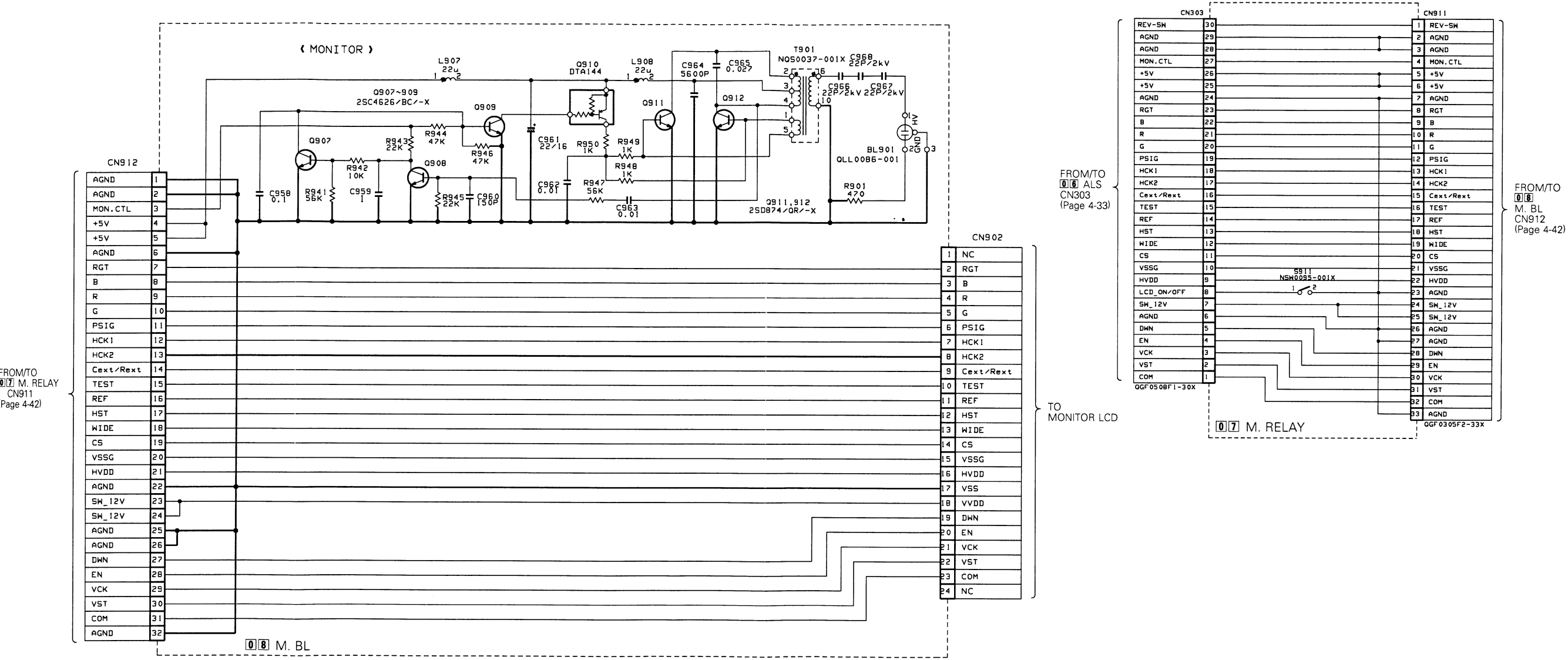
— SWF —



4.23 M. BL & M. RELAY SCHEMATIC DIAGRAMS

— M. BL —

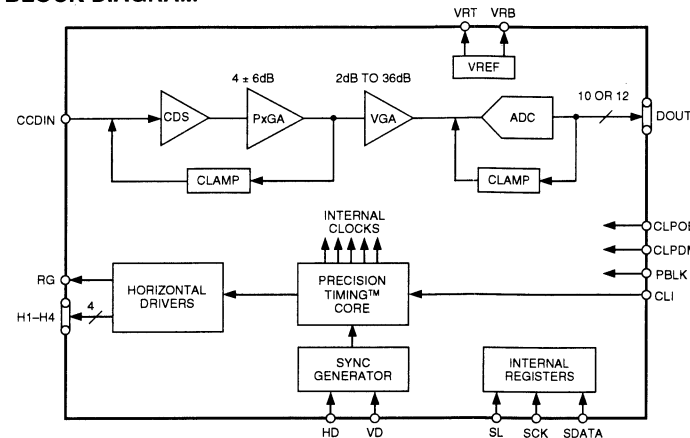
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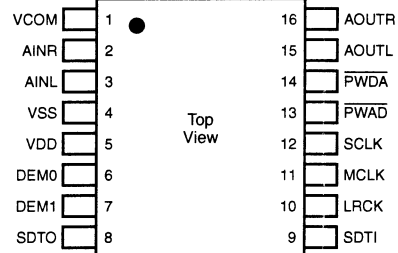
4.25 IC BLOCK DIAGRAMS

■ AD9849AKST-W [ANALOG DEVICES] (CCD Signal Processors with Integrated Timing Driver)

BLOCK DIAGRAM



■ AK4550VT-X [ASAHI KASEI] (Low Voltage 16bit AD/DA Converter)

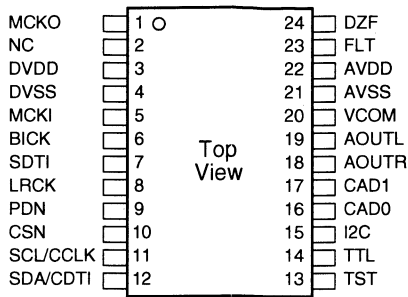


Pin Description

No.	Pin Name	I/O	Function
1	VCOM	O	Common Voltage Output Pin, 0.45 x VDD
2	AINR	I	Rch Analog Input Pin
3	AINL	I	Lch Analog Input Pin
4	VSS	-	Ground Pin
5	VDD	-	Power Supply Pin
6	DEM0	I	De-emphasis Control Pin
7	DEM1	I	De-emphasis Control Pin
8	SDTO	O	Audio Serial Data Output Pin
9	SDTI	I	Audio Serial Data Input Pin
10	LRCK	I	L/R Channel Clock Pin
11	MCLK	I	Master Clock Input Pin
12	SCLK	I	Audio Serial Data Clock Pin
13	PWAD	I	ADC Power-Down & Reset Mode Pin "L":Power down. ADC should always be reset upon power-up.
14	PWDA	I	DAC Power-Down & Reset Mode Pin "L":Power down. DAC should always be reset upon power-up.
15	AOUTL	O	Lch Analog Output Pin
16	AOUTR	O	Rch Analog Output Pin

■ AK4363VF-X [ASAHI KASEI] (Stereo CMOS D/A Converter and Phase Locked Loop)

Pin Layout

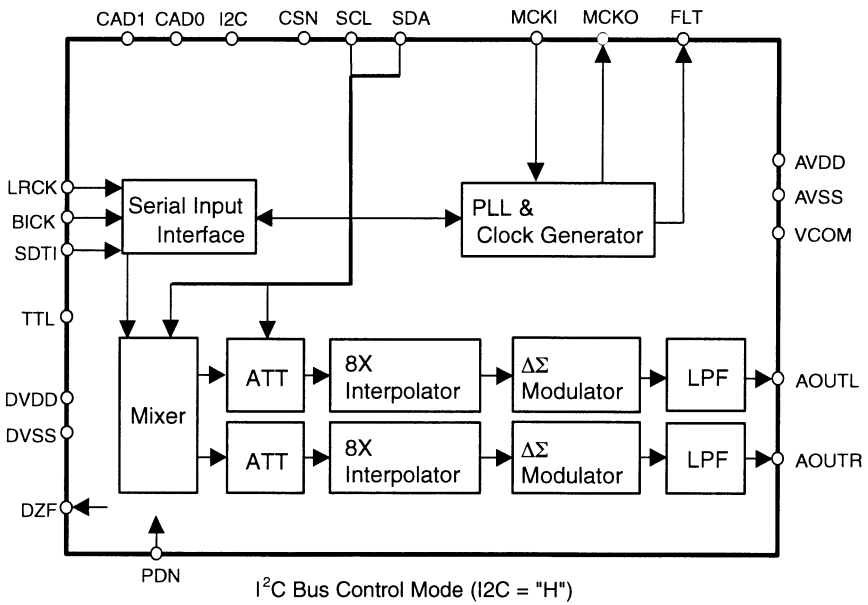
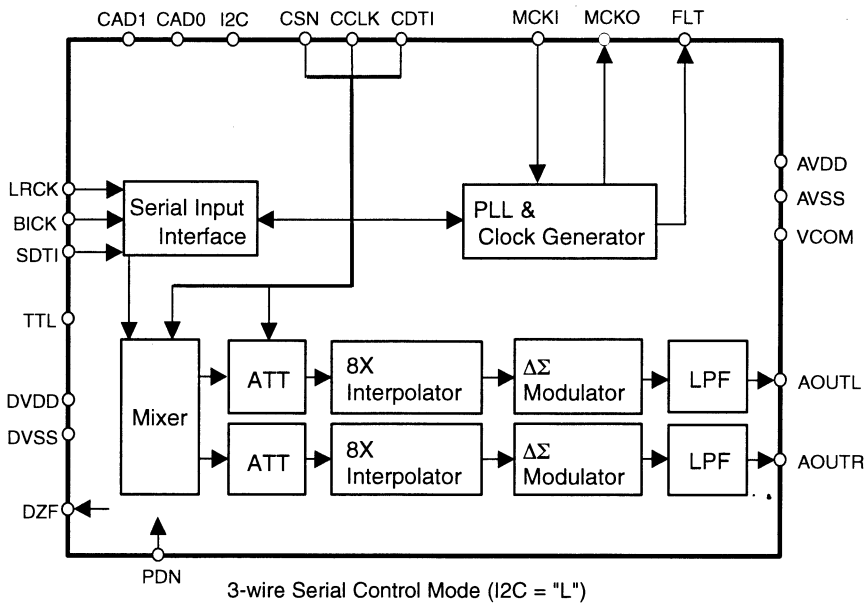


Pin/Function

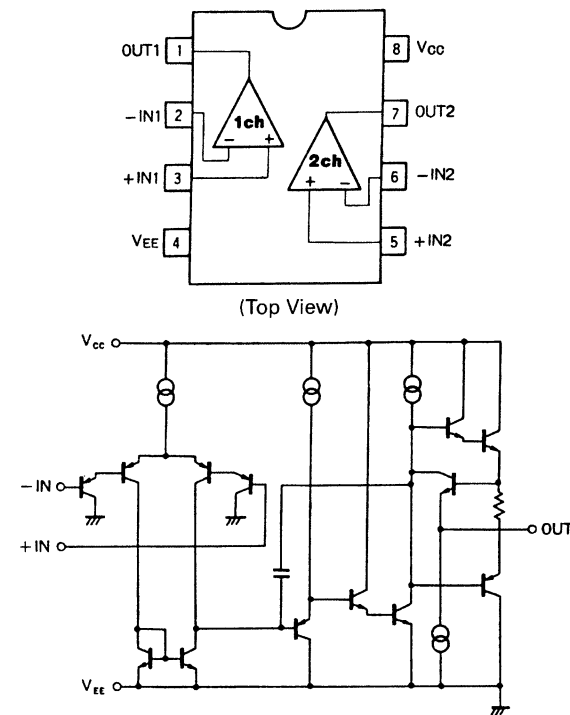
No.	Pin Name	I/O	Description
1	MCKO	O	Master Clock Output Pin EXT = "0" : System clock is output from PLL circuit (PLL mode), EXT = "1" : Same frequency as MCKI is output (External mode)
2	NC	-	No Connect Nothing should be connected externally to this pin.
3	DVDD	-	Digital Power Supply Pin, +2.7~ +5.5V
4	DVSS	-	Digital Ground Pin, 0V
5	MCKI	I	System Clock Input Pin EXT = "0" : 27MHz (PLL mode), EXT = "1" : Other frequency (External mode)
6	BICK	I	Serial Data Clock Pin
7	SDTI	I	Serial Data Input Pin
8	LRCK	I	Serial Input Channel Clock Pin
9	PDN	I	Power-Down Pin When "L", the circuit is in power-down mode. The AK4363 should always be reset upon power-up.
10	CSN	I	Chip Select Pin at 3-wire Serial control mode This pin should be connected to DVDD at I ² C Bus control mode.
11	SCL	I	Control Clock Pin at I ² C bus control mode
12	CCLK	I	Control Clock Pin at 3-wire serial control mode
12	SDA	I/O	Control Data Input/Output Pin at I ² C Bus control mode
12	CDTI	I	Control Data Input Pin at 3-wire serial control mode
13	TST	I	Test pin This pin should be connected to DVSS.
14	TTL	I	Digital Input Level Select Pin "L" : CMOS, "H" : TTL
15	I2C	I	Control Mode Select Pin "L" : 3-wire Serial, "H" : I ² C Bus
16	CAD0	I	Chip Address Select 0 Pin
17	CAD1	I	Chip Address Select 1 Pin
18	AOUTR	O	Rch Analog Output Pin
19	AOUTL	O	Lch Analog Output Pin
20	VCOM	O	Common Voltage Output Pin, AVDD/2 Used for analog common voltage. Large external capacitor is used to reduce power supply noise.
21	AVSS	-	Analog Ground Pin
22	AVDD	-	Analog Power Supply Pin
23	FLT	O	Output Pin for Loop Filter of PLL Circuit This pin should be connected to AVSS with one resistor and one capacitor in series. (See "SYSTEM DESIGN")
24	DZF	O	Zero Input Detect Pin When SDTI follows a total 8192 LRCK cycles with "0" input data or RSTN = "0", this pin goes to "H".

Note: No input pins should be left floating.

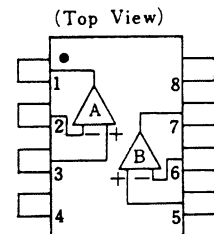
Block Diagram



■ BA10358F-XE [ROHM]
(Dual Ground Sense Op.Amp)

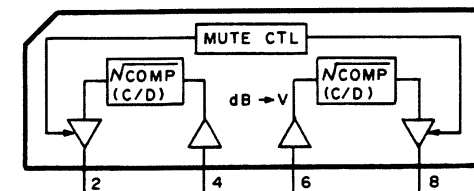


■ BA10393F-XE [ROHM]
(Dual Comparator)

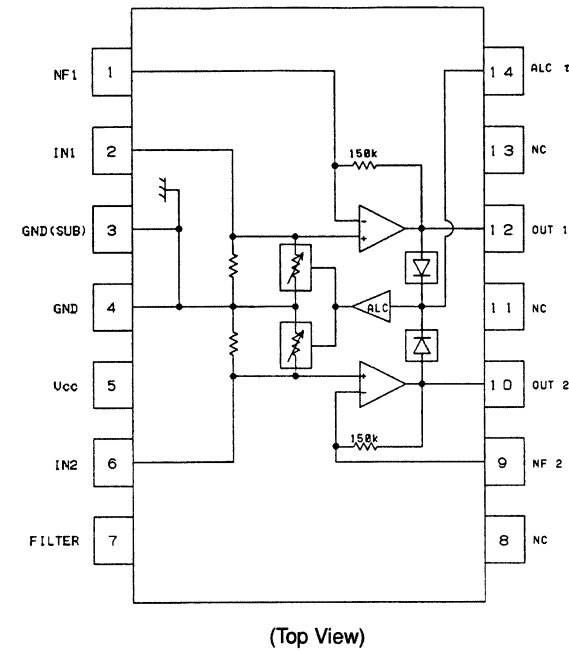


Pin
1. A OUTPUT
2. A-INPUT
3. A+INPUT
4. V-
5. B+INPUT
6. B-INPUT
7. B OUTPUT
8. V+

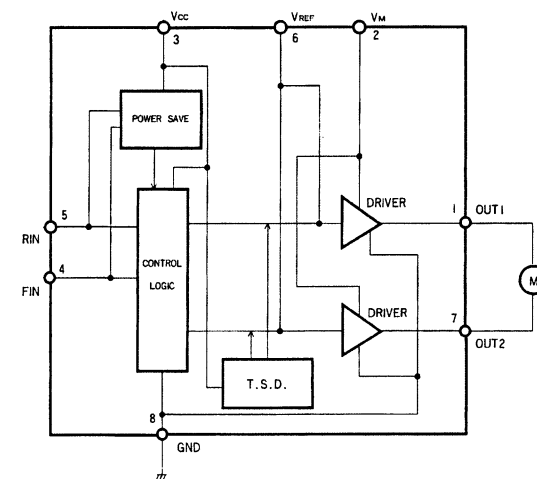
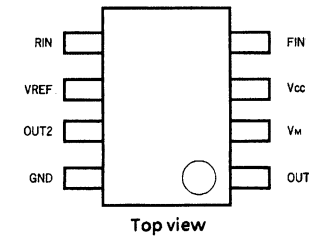
■ BA6138F-X [ROHM]
(1/2 square-law compression amplifiers)



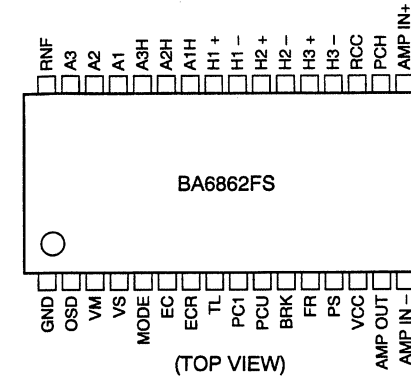
■ BA3314F-X [ROHM]
(Dual Pre-Amp. for Audio Signal)



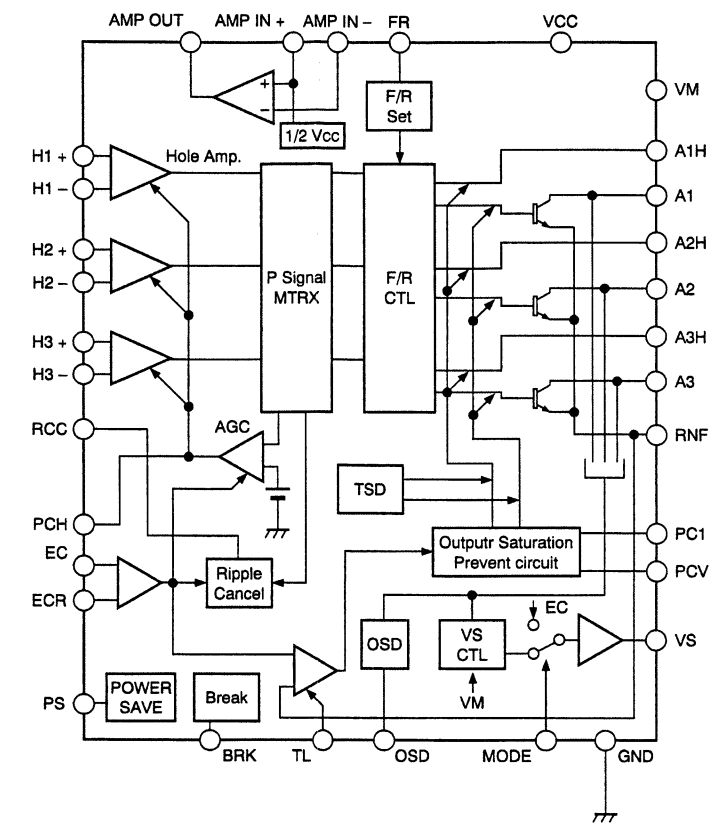
■ BA6417F-X [ROHM]
(Reversible Motor Driver)



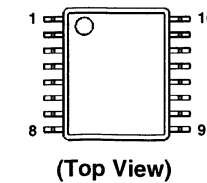
■ BA6862FS-X [ROHM]
(Motor Driver)



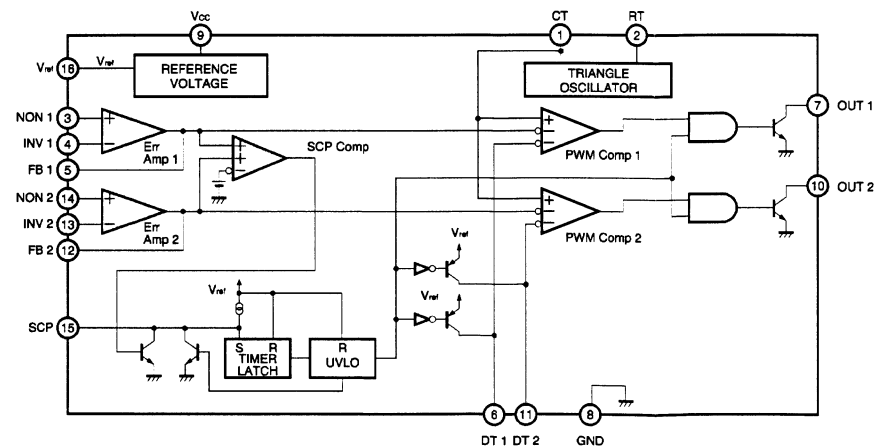
Pin No.	Symbol	Function
1	GND	GND
2	OSD	Output detect for short circuit
3	VM	Power source for motor drive
4	VS	Control for motor drive
5	MODE	Current/Voltage switching
6	EC	Torque control
7	ECR	Torque reference
8	TL	Torque limited
9	PC1	Output saturation prevent level (low level)
10	PCV	Output saturation prevent level (high level)
11	BRK	Break input H: Break L: Movement
12	FR	Forward/Reverse CTL input
13	PS	Power save H: Stand-by L: Movement
14	VCC	
15	AMP OUT	Amplifier output
16	AMP IN -	Amplifier input (-)
17	AMP IN +	Amplifier input (+)
18	PCH	Hole amp, AGC phase comparator
19	RCC	Ripple cancel
20	H3 -	Hole signal input
21	H3 +	Hole signal input
22	H2 -	Hole signal input
23	H2 +	Hole signal input
24	H1 -	Hole signal input
25	H1 +	Hole signal input
26	A1H	Pre motor drive output
27	A2H	Pre motor drive output
28	A3H	Pre motor drive output
29	A1	Motor drive output
30	A2	Motor drive output
31	A3	Motor drive output
32	RNF	GND for motor drive



■ BA9743AFV-X [ROHM]
(2-channel Switching Regulator Controller)



Block Diagram



Pin Diagram (Top View):

16	15	14	13	12	11	10	9
VDD	OUTPUT ENABLE	Q5	Q6	Q7	Q8	Q's	Qs

STROBE	DATA	CLOCK	Q1	Q2	Q3	Q4	Vss
1	2	3	4	5	6	7	8

Block Diagram:

```

graph TD
    DATA[DATA 2] --> SR[8-STAGE SHIFT REGISTER]
    CLOCK[CLOCK 3] --> SR
    SR --> L[8-BIT LATCHES]
    STROBE[STROBE 1] --> L
    L --> O[3-STATE OUTPUTS]
    OEN[OUTPUT ENABLE 15] --> O
    O -- Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8 --> PO[PARALLEL OUTPUT]
    SR -- Q's 10, Qs 9 --> SO[SERIAL OUTPUT]
  
```

(Top View)

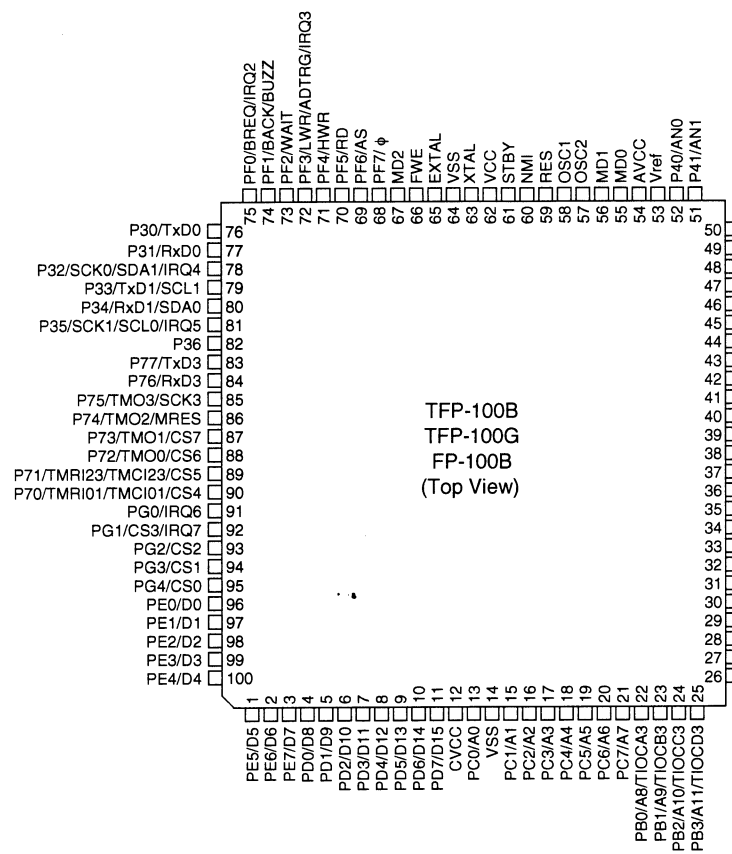
Pin	Signal
1	S1
2	VDD
3	GND
4	ICLK
5	FBIN
6	S0
7	CLK
8	CLK/2

Number	Name	Type	Description
1	S1	I	Select 1 for output clock. Connect to GND, VDD, or float per decoding table above.
2	VDD	P	Connect to +3.3V.
3	GND	P	Connect to ground.
4	ICLK	CI	Reference clock input.
5	FBIN	CI	Feedback clock input.
6	S0	I	Select 0 for output clock. Connect to GND, VDD, or float per decoding table above.
7	CLK	O	Clock output per table above.
8	CLK/2	O	Clock output per table above. Low skew divide by two of pin 7 clock.

```

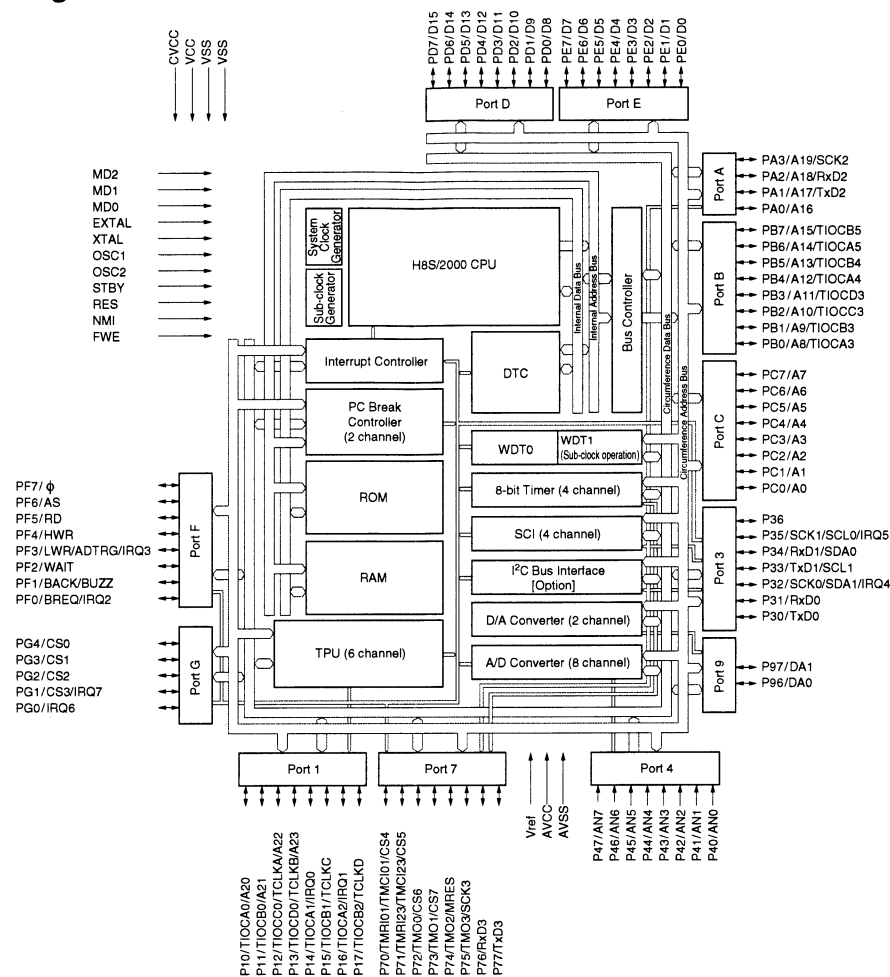
graph LR
    ICLK --> PDLF[Phase Detector, Charge Pump, and Loop Filter]
    S1_S0[S1, S0] -- "2 /" --> DN[divide by N]
    DN --> PDLF
    PDLF --> VCO[Voltage Controlled Oscillator]
    VCO --> Sum[+2]
    Sum --> OutBuf1[Output Buffer]
    Sum --> OutBuf2[Output Buffer]
    OutBuf1 --> CLK
    OutBuf2 --> CLK2[CLK/2]
    CLK2 -- "divide by N" --> FBIN
    FBIN --> DN
  
```

■ HD64F2238RFA13 [HITACHI]
(16-Bit Single Chip Micro Computer)

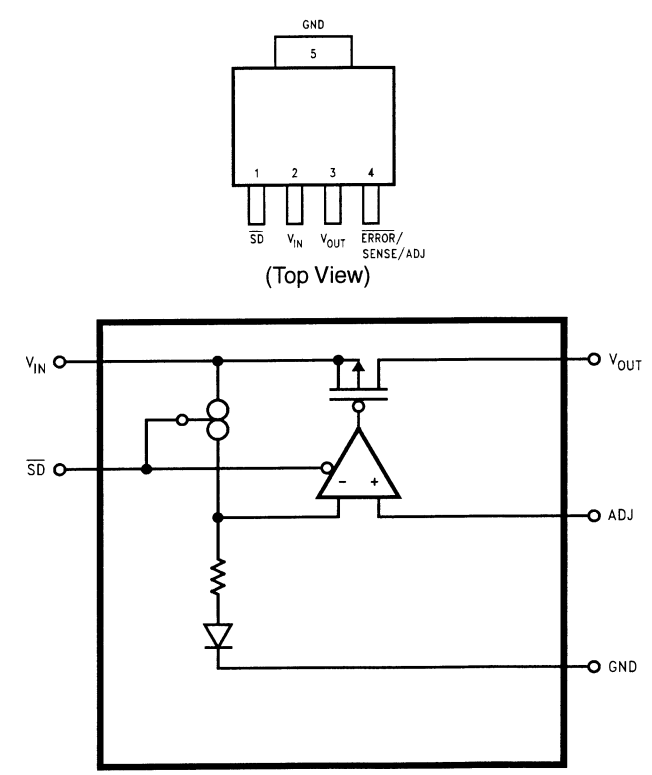


TFP-100B
TFP-100G
FP-100B
(Top View)

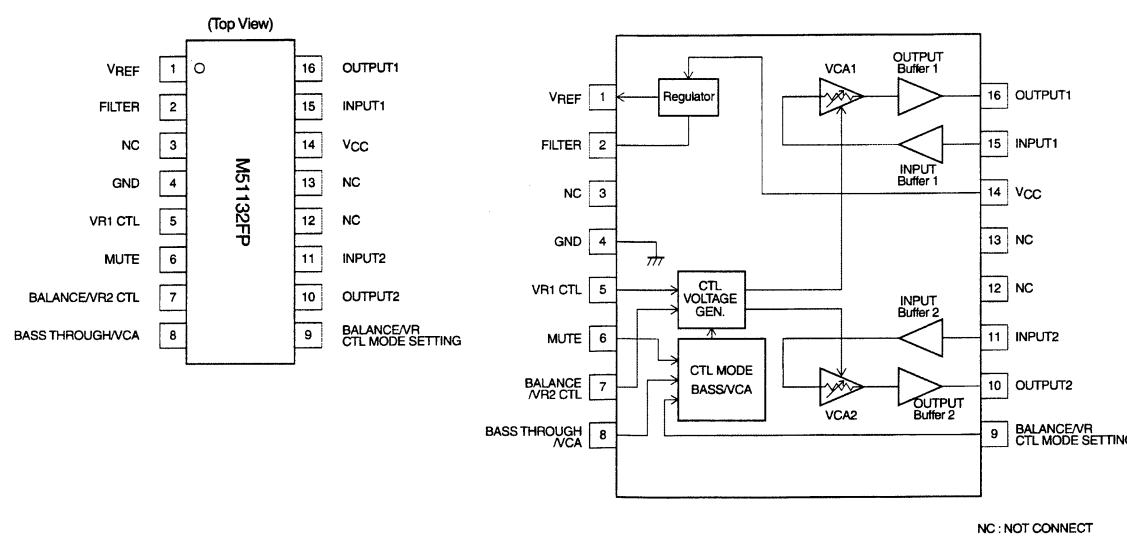
Block diagram



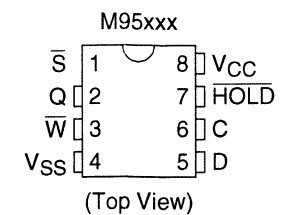
■ LP3965EMP-ADJ-X [NATIONAL SEMICONDUCTOR]
(1.5A Fast Ultra Low Dropout Linear Regulators)



■ M51132FP-X [MITSUBISHI]
(2 Channel Electrical VR/Balance for Audio Level)



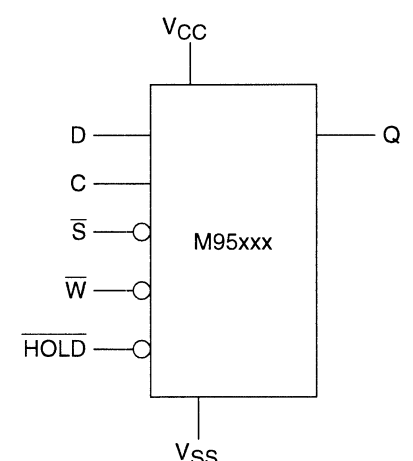
■ M95320-WMN6-X [ST MICROELECTRONICS]
(64/32 Kbit Serial SPI Bus EEPROM)



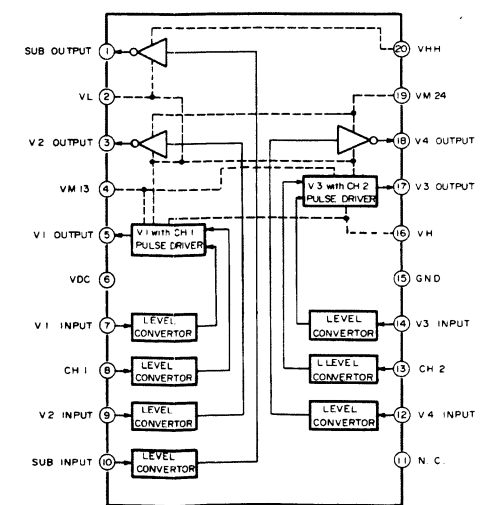
Signal Names

C	Serial Clock
D	Serial Data Input
Q	Serial Data Output
S	Chip Select
W	Write Protect
HOLD	Hold
VCC	Supply Voltage
VSS	Ground

Logic Diagram



■ MN3112SA-X [MATSUSHITA]
(Vertical Driver)



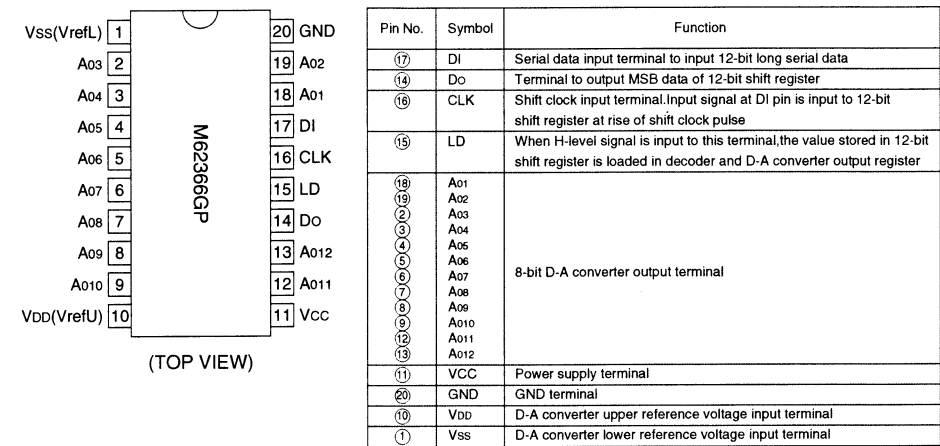
Block diagram



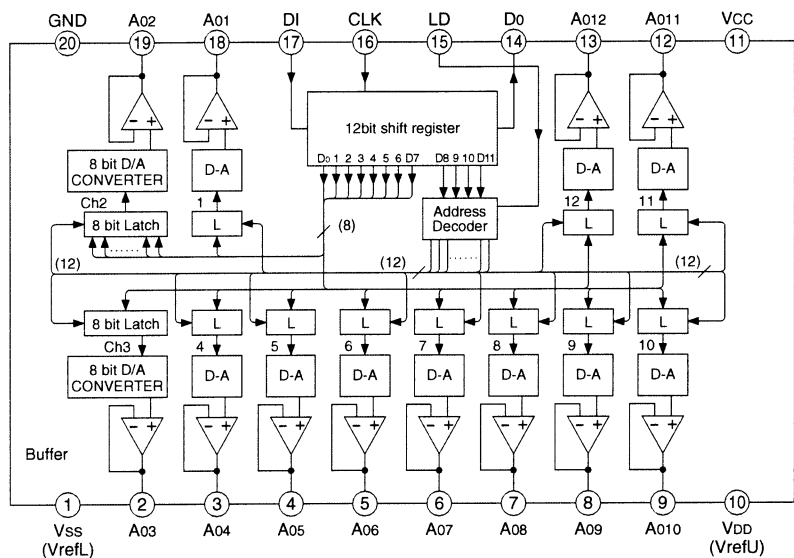
PIN ASSIGNMENT



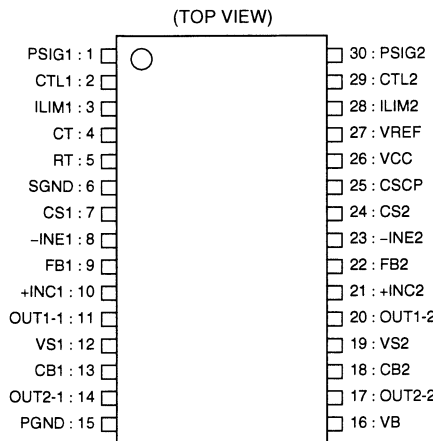
■ M62366GP-X [MITSUBISHI]
(8bit 12channel D/A converter)



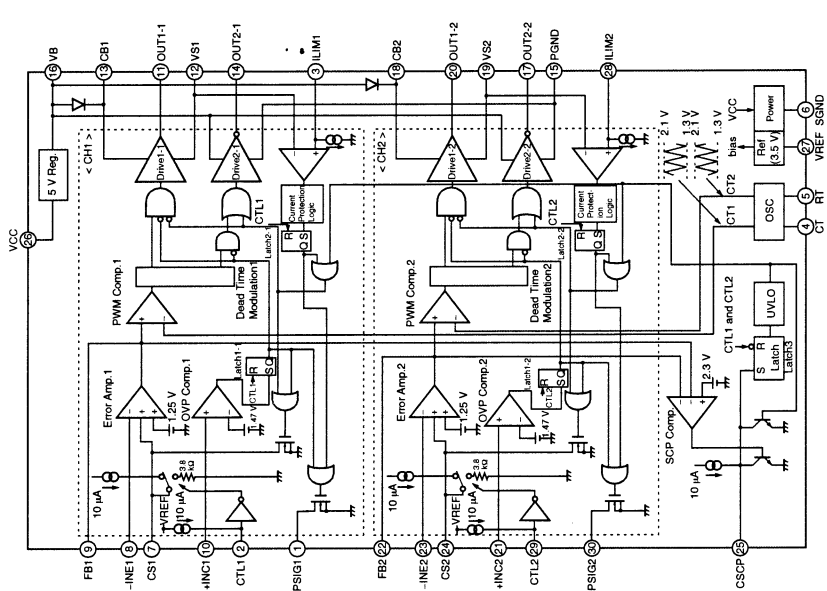
Block Diagram



■ MB3886PFV [FUJITSU]
(2-Channel DC/DC converter)



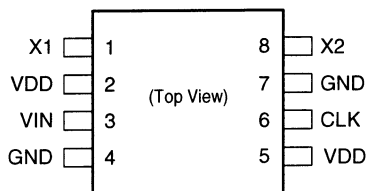
Block Diagram



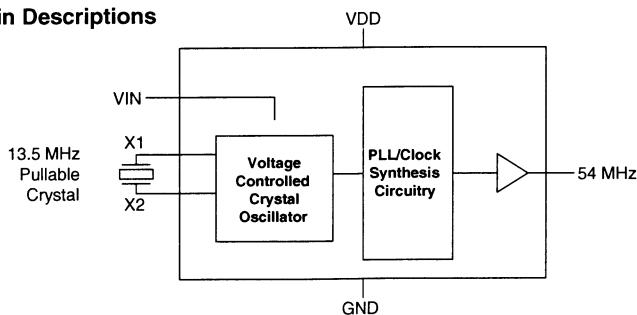
■ Pin description

Pin No.	Pin name	I/O	Description
1	PSIG1	O	CH1 protection status output terminal
2	CTL1	I	CH1 control terminal "H" level : CH1 ON state "L" level : CH1 OFF state and protection status reset
3	ILIM1	I	CH1 overcurrent detection resistor connection terminal
4	CT	—	Triangular waveform oscillation frequency setting capacitor connection terminal
5	RT	—	Triangular waveform oscillation frequency setting resistor connection terminal
6	SGND	—	Ground terminal
7	CS1	—	CH1 soft-start capacitor connection terminal
8	-INE1	I	CH1 error amp. inverting input terminal
9	FB1	O	CH1 error amp. output terminal
10	+INC1	I	CH1 overvoltage comparator noninverting input terminal
11	OUT1-1	O	CH1 totem-pole output terminal (External main-side FET gate drive)
12	VS1	—	CH1 external main-side FET source connection terminal
13	CB1	—	CH1 boot capacitor connection terminal Connect a capacitor between the CB1 and VS1 terminals.
14	OUT2-1	O	CH1 totem-pole output terminal (External synchronous-rectification-side FET gate drive)
15	PGND	—	Ground terminal
16	VB	O	Output circuit bias output terminal
17	OUT2-2	O	CH2 totem-pole output terminal (External synchronous-rectification-side FET gate drive)
18	CB2	—	CH2 boot capacitor connection terminal Connect a capacitor between the CB2 and VS2 terminals.
19	VS2	—	CH2 external main-side FET source connection terminal
20	OUT1-2	O	CH2 totem-pole output terminal (External main-side FET gate drive)
21	+INC2	I	CH2 overvoltage comparator noninverting input terminal
22	FB2	O	CH2 error amp. output terminal
23	-INE2	I	CH2 error amp. inverting input terminal
24	CS2	—	CH2 soft-start capacitor connection terminal
25	CSCP	—	Timer-latch short-circuit protection capacitor connection terminal
26	VCC	—	Reference voltage, control circuit power supply terminal
27	VREF	O	Reference voltage output terminal
28	ILIM2	I	CH2 overcurrent detection resistor connection terminal
29	CTL2	I	CH2 control terminal "H" level : CH2 ON state "L" level : CH2 OFF state and protection status reset
30	PSIG2	O	CH2 protection status output terminal

■ MK3754D-X [ICS]
(Low Cost 54MHz 3.3 Volt VCXO)



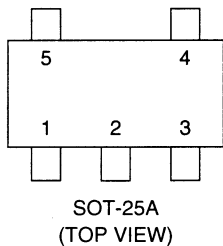
Pin Descriptions



Block Diagram

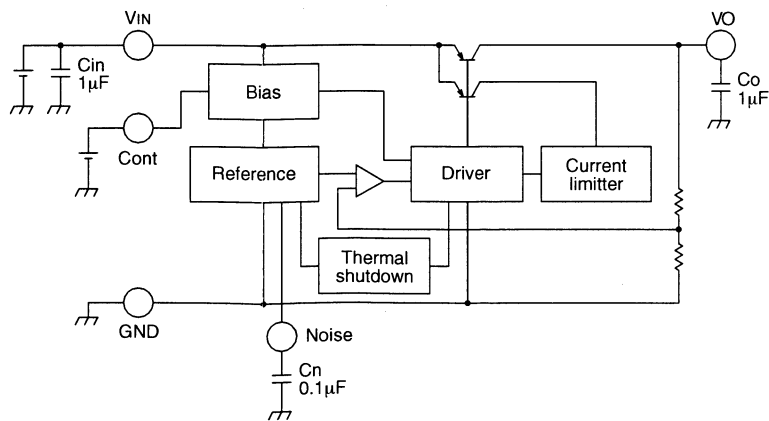
Pin Number	Pin Name	Pin Type	Pin Description
1	X1	Input	Crystal connection. Connect to the external pullable crystal.
2	VDD	Power	Connect to +3.3 V (0.01uF decoupling capacitor recommended).
3	VIN	Input	Voltage input to VCXO -- 0 to 3.3 V analog input which controls the oscillation frequency of the VCXO.
4	GND	Power	Connect to ground.
5	VDD	Power	Connect to +3.3 V (0.01uF decoupling capacitor recommended).
6	CLK	Output	54 MHz clock output.
7	GND	Power	Connect to ground.
8	X2	Input	Crystal connection. Connect to the external pullable crystal.

■ MM1571JN-X [MITSUMI]
(1.8V Regulator)



1	VIN
2	GND
3	Cont
4	Noise
5	VO

Block Diagram



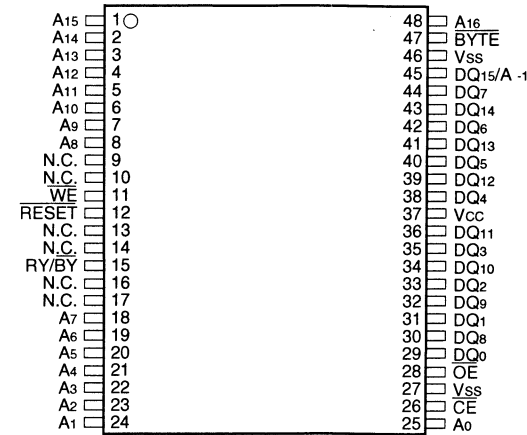
■ MM1572FN-X [MITSUMI]
(Refer to MM1571JN-X.)

■ MM1572KN-X [MITSUMI]
(Refer to MM1571JN-X.)

■ MM1573AN-X [MITSUMI]
(Refer to MM1571JN-X.)

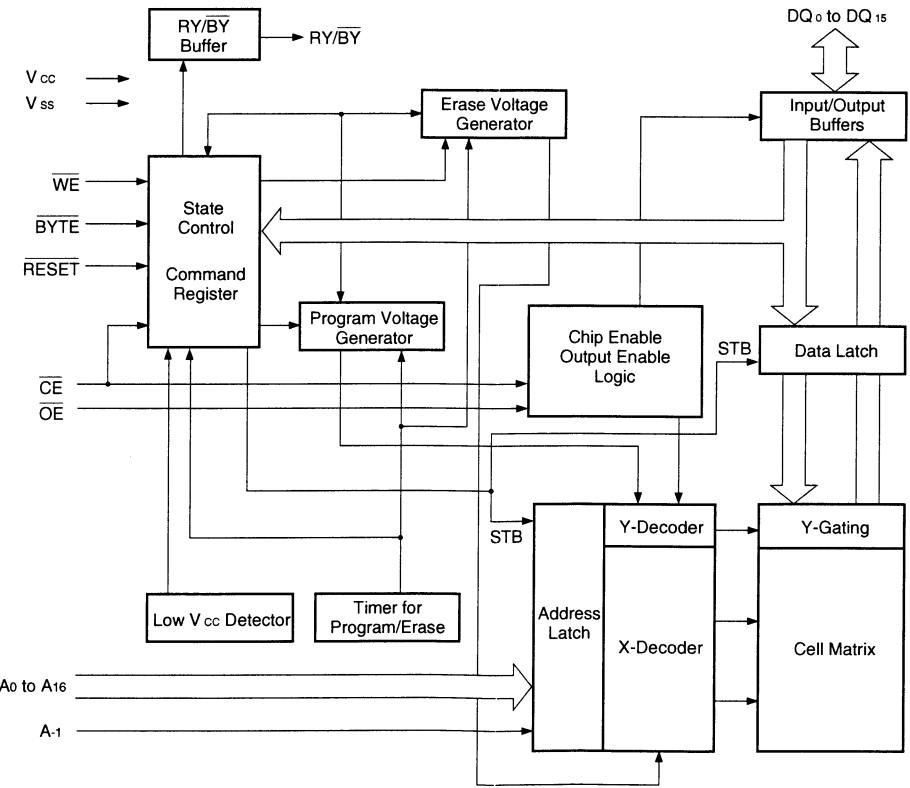
■ MM1573DN-X [MITSUMI]
(Refer to MM1571JN-X.)

■ MBV200BC90PT [FUJITSU]
(2M Bit Flash Memory)

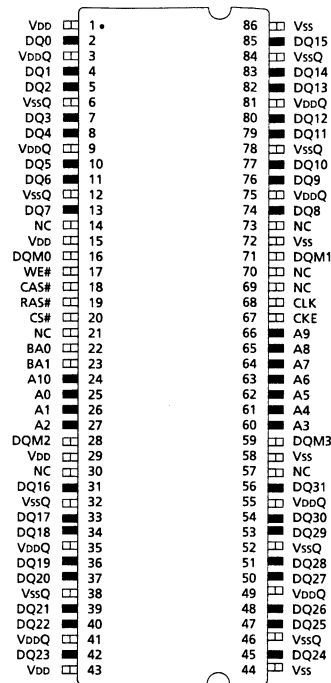


(TOP VIEW)

Pin	Function	Pin	Function
A-1, A0 - A16	Address Inputs	RY/BY	Ready/Busy Output
DQ0 - DQ15	Data Inputs/Outputs	BYTE	Selects 8-bit or 16-bit mode
CE	Chip Enable	Vss	Device Ground
OE	Output Enable	Vcc	Device Power Supply
WE	Write Enable	N.C.	No Internal Connection
RESET	Hardware Reset Pin/ Temporary Sector Unprotection	-	-



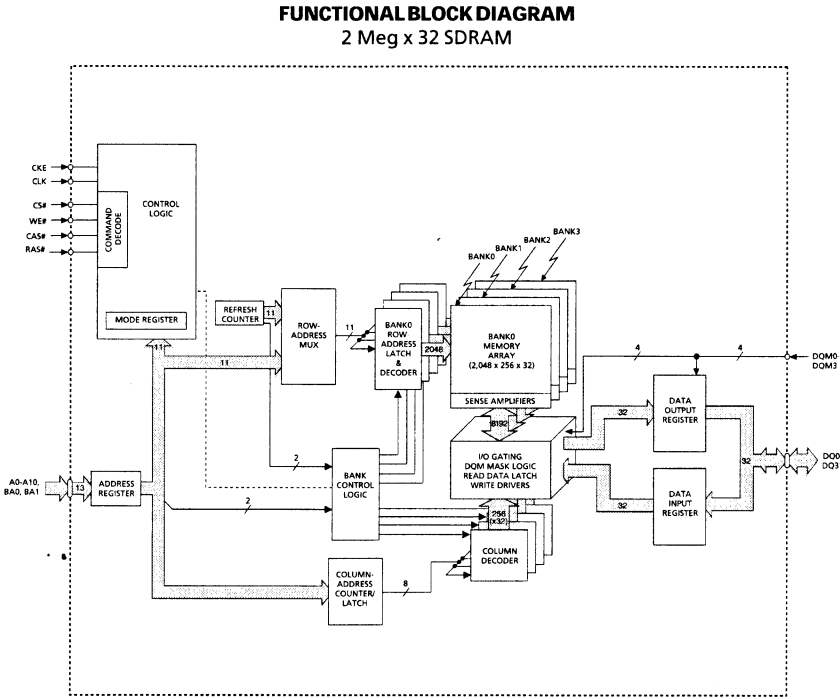
■ MT48LC2M32B2-X [MICRON]
(64Mb (2Meg x 32) SDRAM)



(Top View)

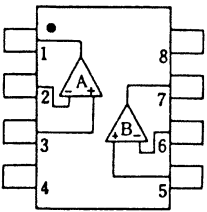
Note: The # symbol indicates signal is active LOW.

	2 Meg x 32
Configuration	512K x 32 x 4 banks
Refresh Count	4K
Row Addressing	2K (A0-A10)
Bank Addressing	4 (BA0, BA1)
Column Addressing	256 (A0-A7)

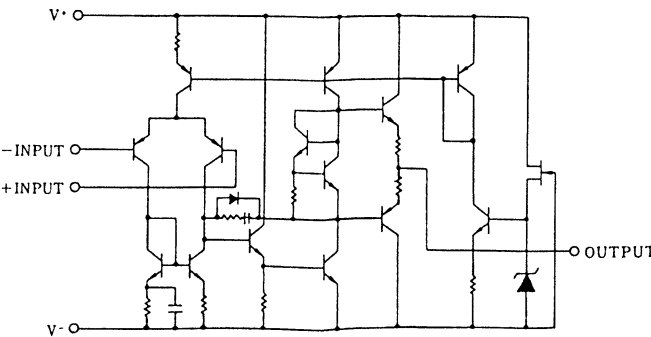


■ NJM2068M-D-XE [JRC]
(Dual Low-Noise Op.Amp)

(Top View)

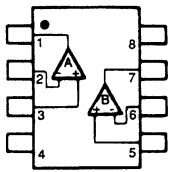


1. A OUTPUT
2. A-INPUT
3. A+INPUT
4. V-
5. B+INPUT
6. B-INPUT
7. B OUTPUT
8. V+



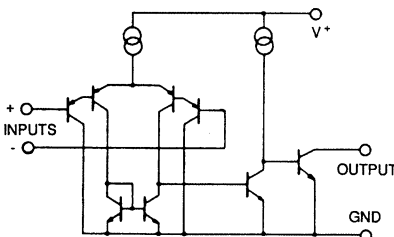
■ NJM2903M-XE [JRC]
(Dual Single Supply Comparator)

D, M Type
(Top View)



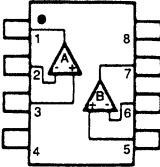
Pin Assignment

1. A OUTPUT
2. A-INPUT
3. A+INPUT
4. GND
5. B+INPUT
6. B-INPUT
7. B OUTPUT
8. V+



■ NJM2904M-XE [JRC]
(Dual Op.Amp.)

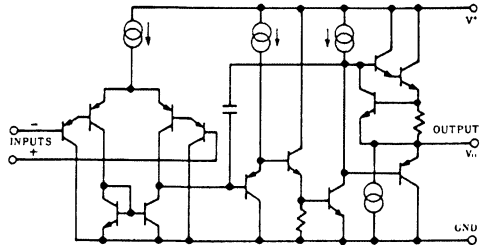
(Top View)



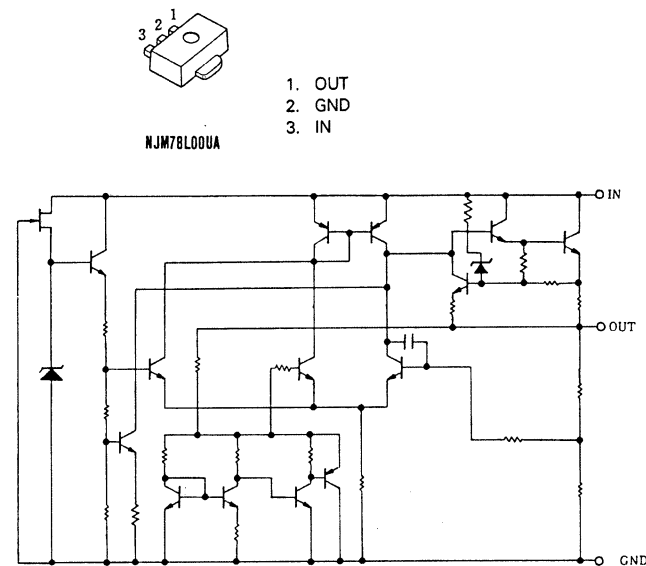
Pin Assignment

1. A OUTPUT
2. A-INPUT
3. A+INPUT
4. GND
5. B+INPUT
6. B-INPUT
7. B OUTPUT
8. V+

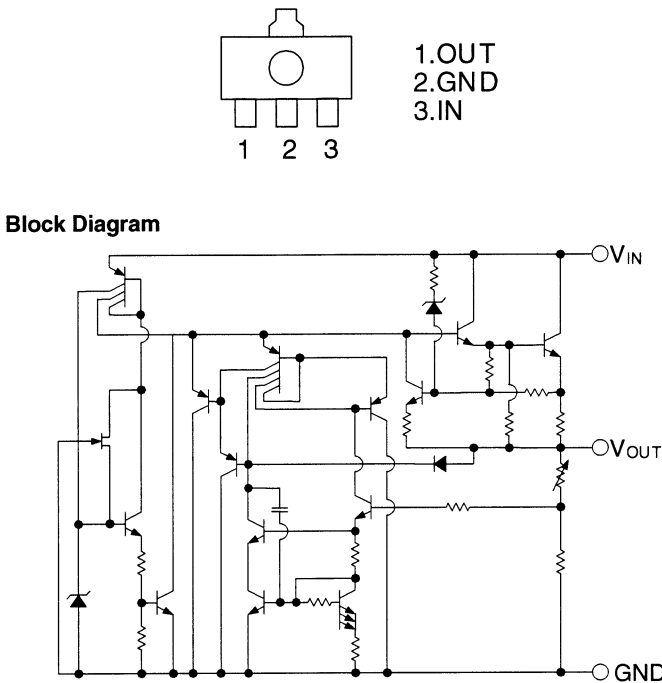
■ Equivalent Circuit (2 circuits in a chip)



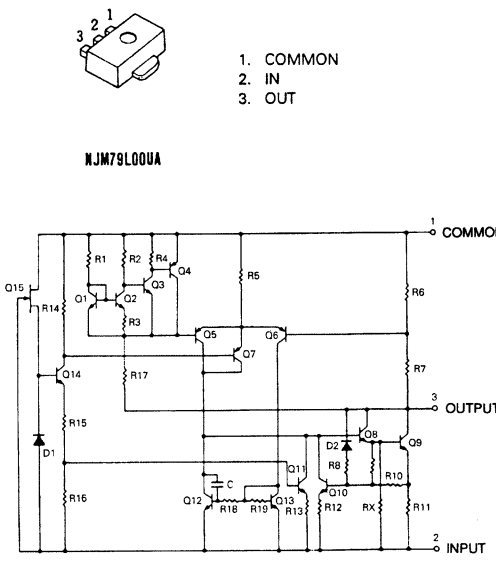
■ NJM78L12UA-X [JRC]
(3-Terminal Positive Voltage Regulator (+12V))



■ NJM78L03UA-X [JRC]
(3-Terminal Positive Voltage Regulator)



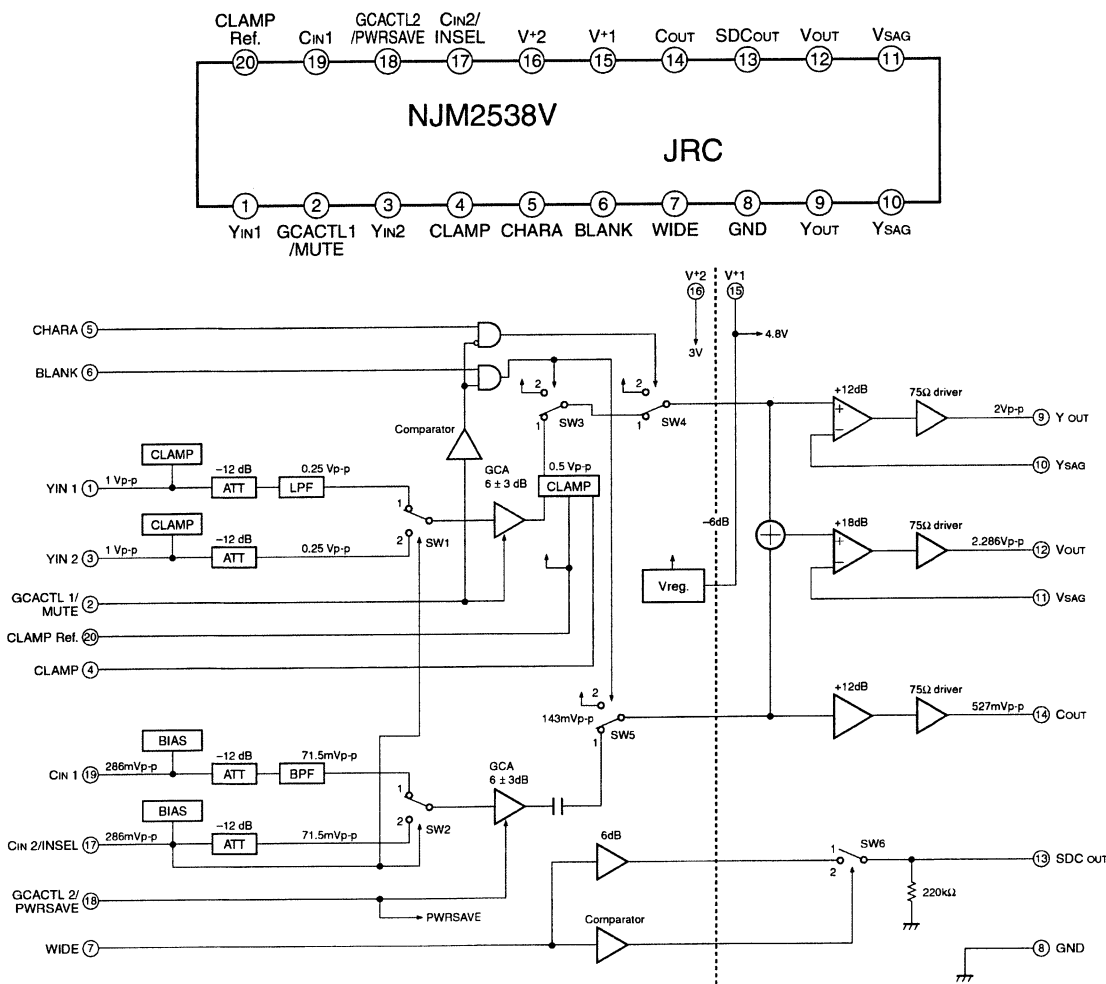
■ NJM79L05UA-X [JRC]
(3-Terminal Negative Voltage Regulator (-5V))



■ NJM79L08UA-X [JRC]
(Refer to NJM79L05UA-X.)

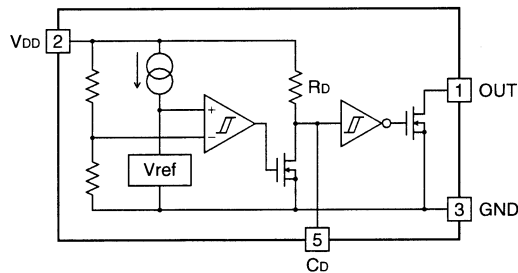
■ NJM2538V-X [JRC]
(Video Amp.)

(Top View)



■ RN5VD26AA-X [RICOH]
(Voltage detector)

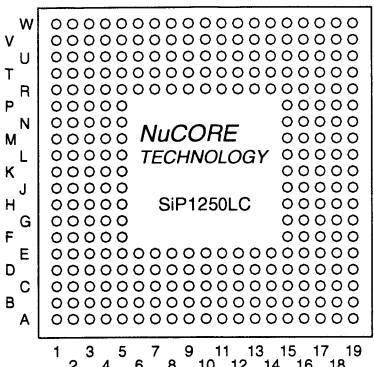
Block diagram



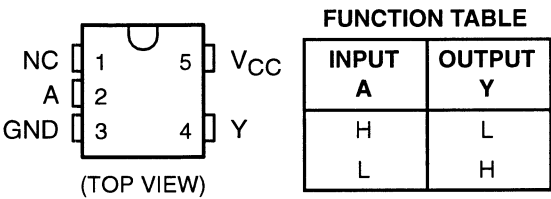
Pin descriptions

Pin Number	Pin Name	Pin Description
1	OUT	Output terminal
2	VDD	Power supply terminal
3	GND	Ground terminal
4	NC	Not connect
5	Cd	External capacitor connecting terminal for delay

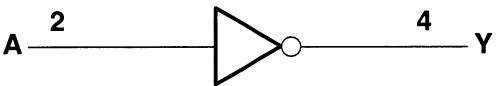
■ SIP1250LC [NuCORE TECHNOLOGY]
(Smart image processor for DVC)



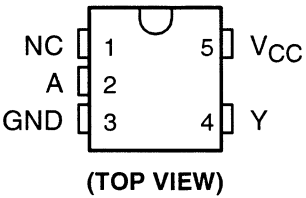
■ SN74AHC1G04K-X [TEXAS INSTRUMENTS]
(Single Inverter Gate)



Logic diagram (positive logic)

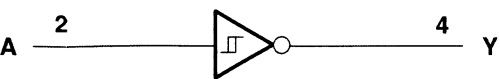


■ SN74AHC1G14K-X [TEXAS INSTRUMENTS]
(Single Schmitt-trigger Inverter Gate)

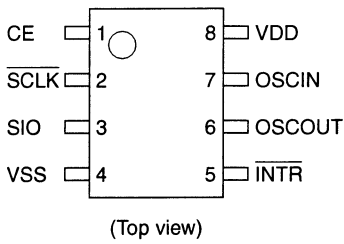


NC-No internal connection

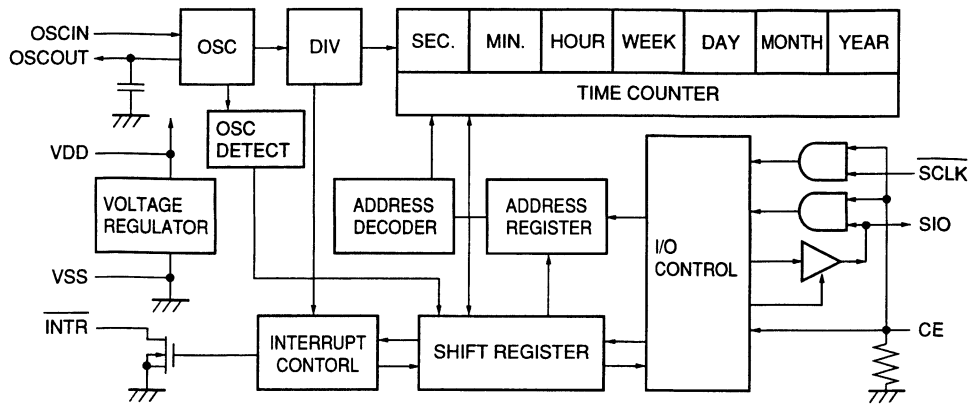
logic diagram (positive logic)



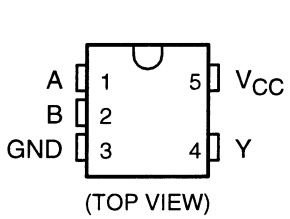
■ RS5C314-X [RICOH]
(CMOS Realtime Clock)



Block diagram

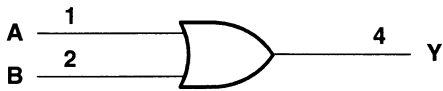


■ SN74AHC1G32K-X [TEXAS INSTRUMENTS]
(Single 2-Input Positive OR Gate)

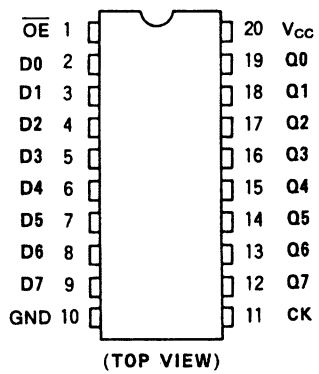


FUNCTION TABLE		
INPUTS		OUTPUT
A	B	Y
H	X	H
X	H	H
L	L	L

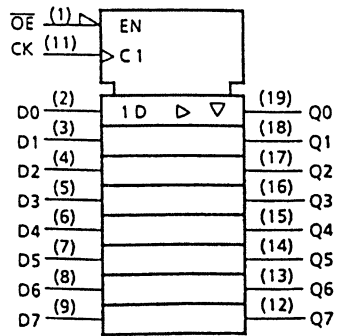
Logic diagram (positive logic)



■ SN74AHC574PW-X [TEXAS INSTRUMENTS]
(Octal D-Type EDGE-Trigger Flip-Flop With NON Inverted 3-State Outputs)



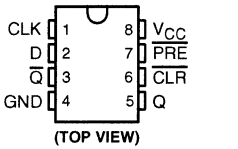
Logic



INPUTS			OUTPUT
OE	CK	D	
H	X	X	Z
L	L	X	Q _n
L	L	L	L
L	L	H	H

X : Don't Care
Z : High Impedance
Q_n : No Change

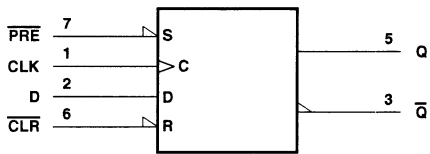
■ SN74AHC2G74U-X [TEXAS INSTRUMENTS]
(D-Type Flip-Flop with Preset and Clear)



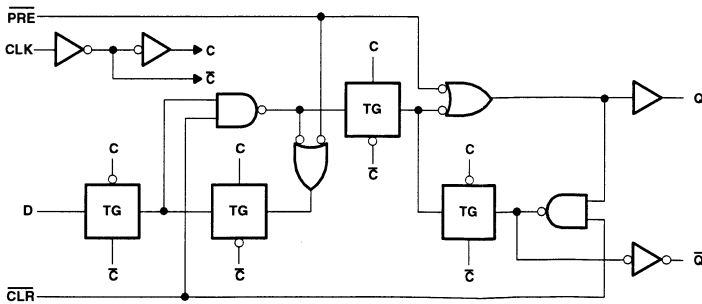
FUNCTION TABLES					
INPUTS				OUTPUTS	
PRE	CLR	CLK	D	Q	Q-bar
L	H	X	X	H	L
H	L	X	X	L	H
L	L	X	X	H [†]	H [†]
H	H	↑	H	H	L
H	H	↑	L	L	H
H	H	↓	X	Q ₀	Q ₀ -bar

[†] This configuration is nonstable; that is, it does not persist when PRE or CLR returns to its inactive (high) level.

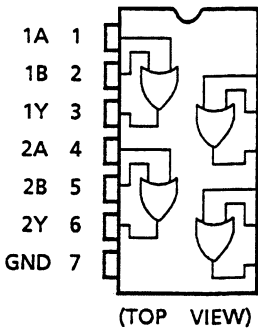
Logic symbol



Block diagram

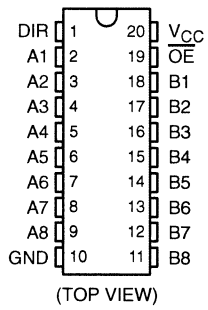


■ TC74VHC32FT-X [TOSHIBA]
(Quad 2-Input OR Gates)



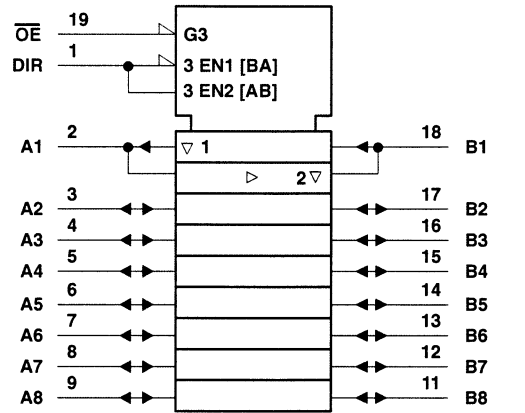
TRUE Table		
A	B	Y
H	H	H
L	H	H
H	L	H
L	L	L

■ SN74AHC245DG-V-X [TEXAS INSTRUMENTS]
(Octal Bus Transceivers with 3-State Outputs)

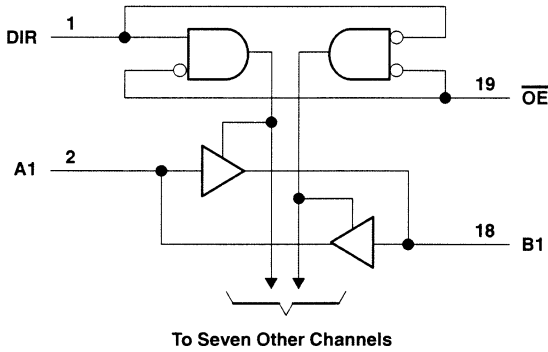


FUNCTION TABLE (each transceiver)		
INPUTS		OPERATION
OE	DIR	
L	L	B data to A bus
L	H	A data to B bus
H	X	Isolation

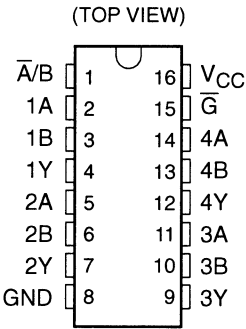
Logic symbol



Logic diagram (positive logic)



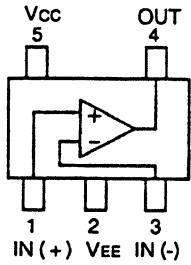
■ SN74LV157APW-X [TEXAS INSTRUMENTS]
(4channel 2line-1line data Selectors/Multiplexers)



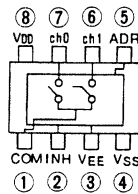
INPUTS				OUTPUT Y
$\overline{G}$	SELECT A/B	DATA		
		A	B	
H	X	X	X	L
L	L	L	X	L
L	L	H	X	H
L	H	X	L	L
L	H	X	H	H

H: High level
L: Low level
X: Don't care

■ TA75S01F-X [TOSHIBA]
(Single Op.Amp.)



■ TC4W53F-X [TOSHIBA]
(2-Channel Multiplexer)

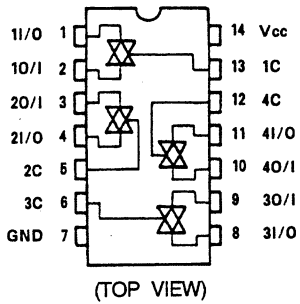


TRUE TABLE

CONTROL INPUT		ON CHANNEL
INH	ADR	
L	L	ch0
L	H	ch1
H	*	NONE

*Don't care

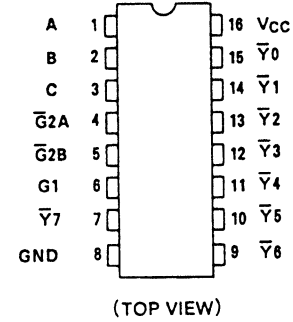
■ TC74HC4066AFT-X [TOSHIBA]
(Quad Analog Switches)



TRUE Table

CONTROL	SWITCH FUNCTION
H	ON
L	OFF

■ SN74LV138ADGV-X [TEXAS INSTRUMENTS]
(1 OF 8 Decoders/Demultiplexers)

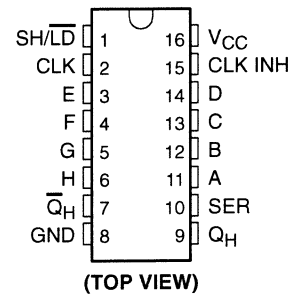


TRUE Table

INPUTS						OUTPUTS								SELECTED OUTPUT
ENABLE			SELECT			Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	
G1	G2A	G2B	C	B	A									
L	X	X	X	X	X	H	H	H	H	H	H	H	H	NONE
X	H	X	X	X	X	H	H	H	H	H	H	H	H	NONE
X	X	H	X	X	X	H	H	H	H	H	H	H	H	NONE
H	L	L	L	L	L	L	L	H	H	H	H	H	H	Y0
H	L	L	L	L	H	H	L	H	H	H	H	H	H	Y1
H	L	L	L	H	L	H	H	L	H	H	H	H	H	Y2
H	L	L	L	H	H	L	L	H	L	H	H	H	H	Y3
H	L	L	H	L	L	H	H	H	H	L	H	H	H	Y4
H	L	L	H	L	H	H	H	H	H	L	H	H	H	Y5
H	L	L	H	H	L	L	H	H	H	H	L	H	H	Y6
H	L	L	H	H	H	L	L	H	H	H	H	L	L	Y7
X : DONT CARE														

X : DONT CARE

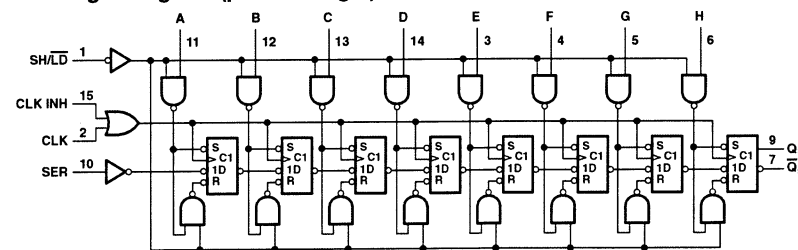
■ SN74LV165ADGV-X [TEXAS INSTRUMENTS]
(8-Bit Serial or Parallel-In/Serial Out Shift Registers)



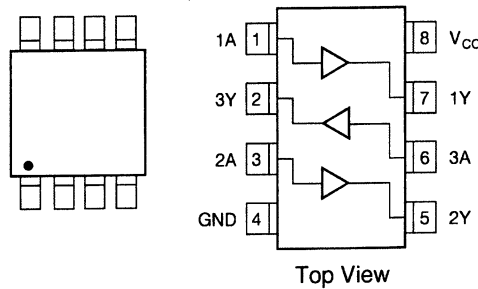
FUNCTION TABLE

INPUTS			OPERATION
SH/LD	CLK	CLK INH	
L	X	X	Parallel load
H	H	X	Q_0
H	X	H	Q_0
H	L	$\uparrow$	Shift
H	$\uparrow$	L	Shift

Logic diagram (positive logic)

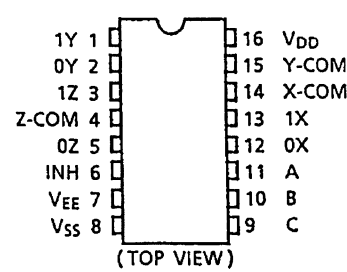


■ TC7W34FU-X [TOSHIBA]
(Triple NON-Invert Buffer)

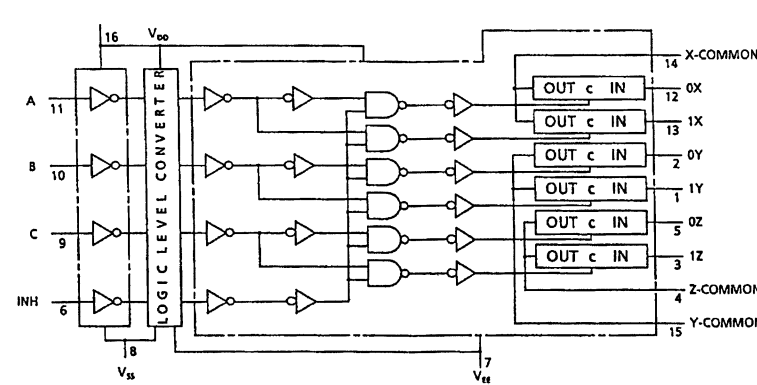


Top View

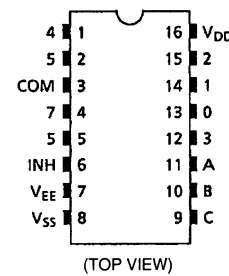
■ TC4053BF-W [TOSHIBA]
(Triple 2-Channel Multiplexer/Demultiplexer)



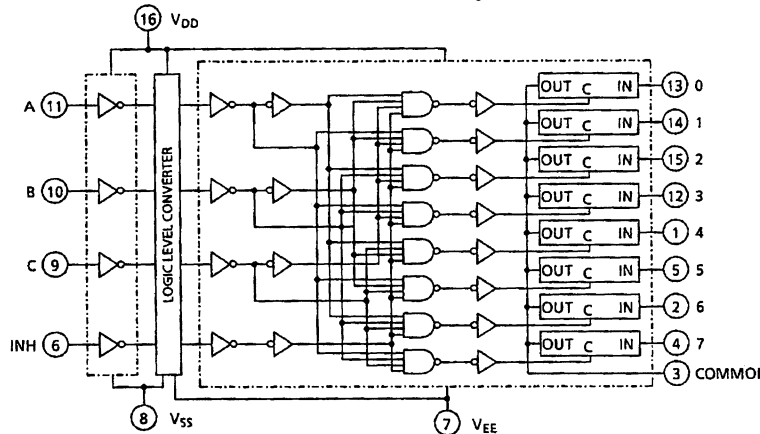
BLOCK DIAGRAM



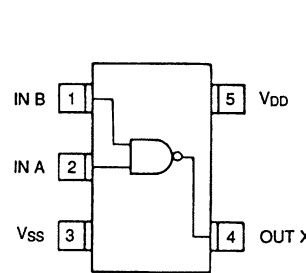
■ TC4051BF-X [TOSHIBA]
(Single 8-Channel Multiplexer/Demultiplexer)



BLOCK DIAGRAM



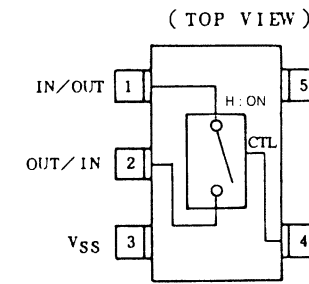
■ TC7SH00FU-X [TOSHIBA]
(2-Input NAND Gate)



TRUE Table

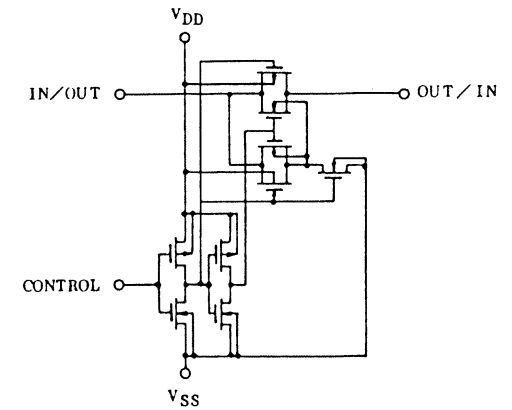
A	B	X
L	L	H
L	H	H
H	L	H
H	H	L

■ TC4S66F-X [TOSHIBA]
(Analog Switch)

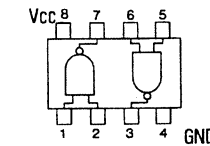


CONTROL	IMPEDANCE BETWEEN IN/OUT - OUT/IN *
H	$0.5 \sim 5 \times 10^2 \Omega$
L	$> 10^9 \Omega$

* See Electrical Characteristics



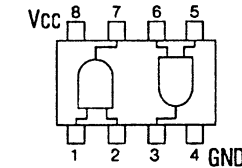
■ TC7W00FU-X [TOSHIBA]
(2 Input Dual NAND Gate)



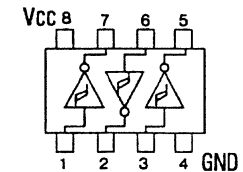
TRUE Table

A	B	X
L	L	H
L	H	H
H	L	H
H	H	L

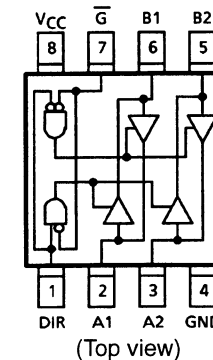
■ TC7W08FU-X [TOSHIBA]
(2 Input Dual AND Gate)



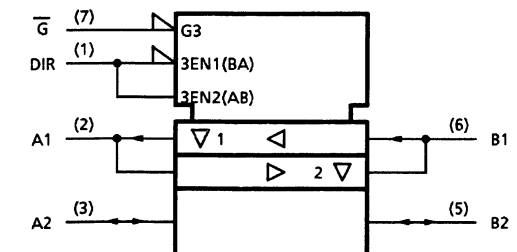
■ TC7W14FU-X [TOSHIBA]
(Schmitt Trigger Triple Invert Gate)



■ TC7WH245FU-X [TOSHIBA]
(Dual Bus Transceiver)



LOGIC DIAGRAM

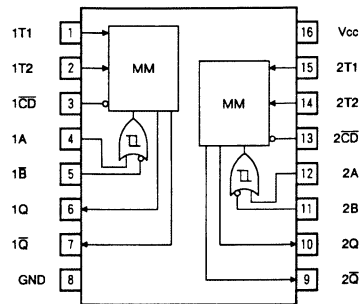


TRUTH TABLE

INPUTS		FUNCTION		OUTPUT
$\overline{G}$	DIR	A BUS	B BUS	
L	L	OUTPUT	INPUT	A = B
L	H	INPUT	OUTPUT	B = A
H	x	High impedance		Z

x : Don't care
Z : High impedance

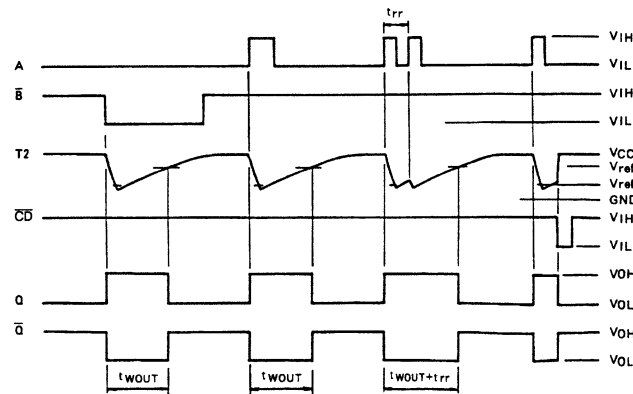
■ TC74HC4538AFT-X [TOSHIBA]
(Dual Retriggerable Monostable Multivibrator)



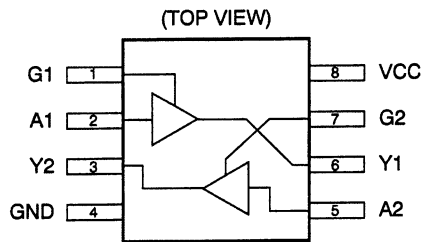
TRUE Table

INPUT			OUTPUT		NOTE
A	B	CD	Q	Q-bar	
H	H	H	H	L	OUTPUT ENABLE
X	L	H	L	H	INHIBIT
H	X	H	L	H	INHIBIT
L	X	H	H	L	OUTPUT ENABLE
X	X	L	L	H	INHIBIT

X: Don't Care



■ TC7W126FU-X [TOSHIBA]
(Dual Bus Buffer)

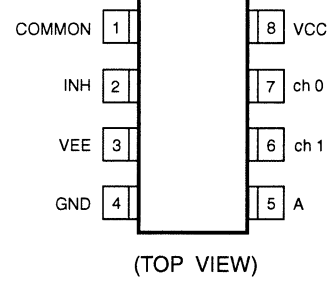


Truth Table

INPUTS		OUTPUTS
G	A	Y
L	X	Z
H	L	L
H	H	H

X : Don't Care
Z : High Impedance

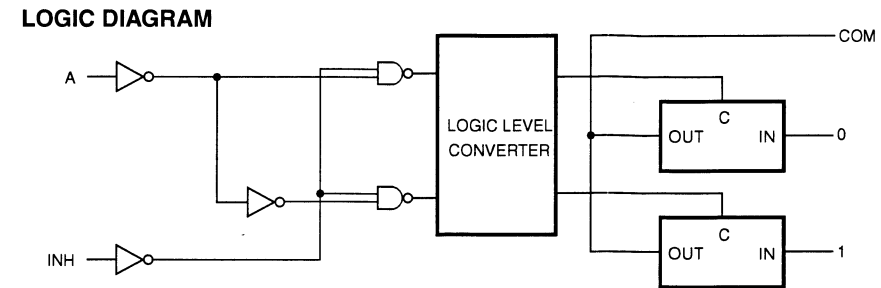
■ TC7W53FU-X [TOSHIBA]
(2-Channel Multiplexer/Demultiplexer)



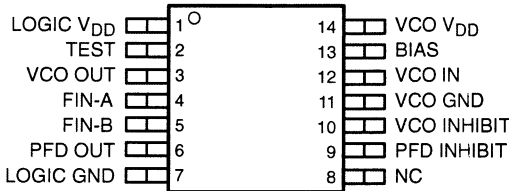
TRUTH TABLE

CONTROL INPUT		ON CHANNEL
INH	A	
L	L	ch 0
L	H	ch 1
H	x	NONE

x : Don't care

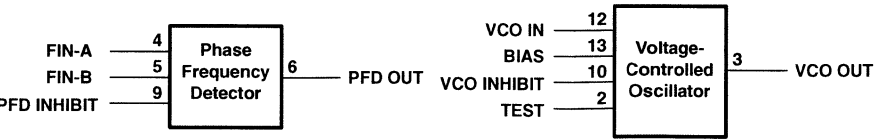


■ TLC2933IPW-X [TEXAS INSTRUMENTS]
(Phase Locked Loop)

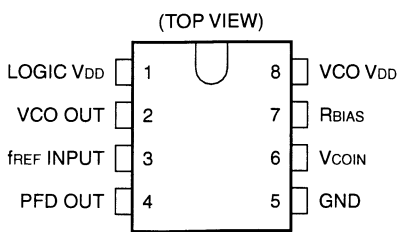


(Top View)

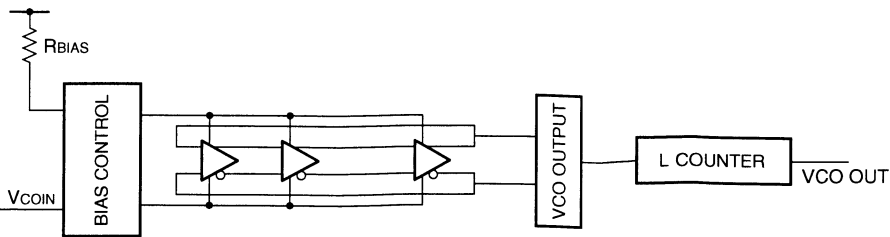
functional block diagram



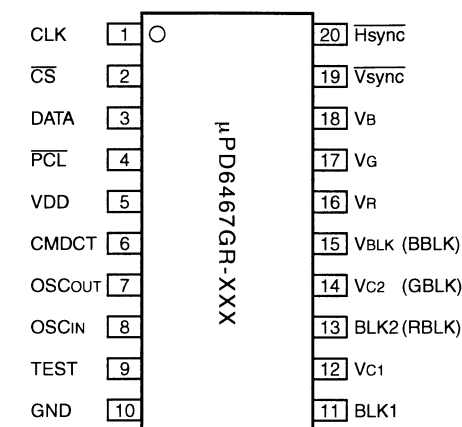
■ TLC2940IPW-X [TEXAS INSTRUMENTS]
(75MHz CMOS VCO)



(TOP VIEW)

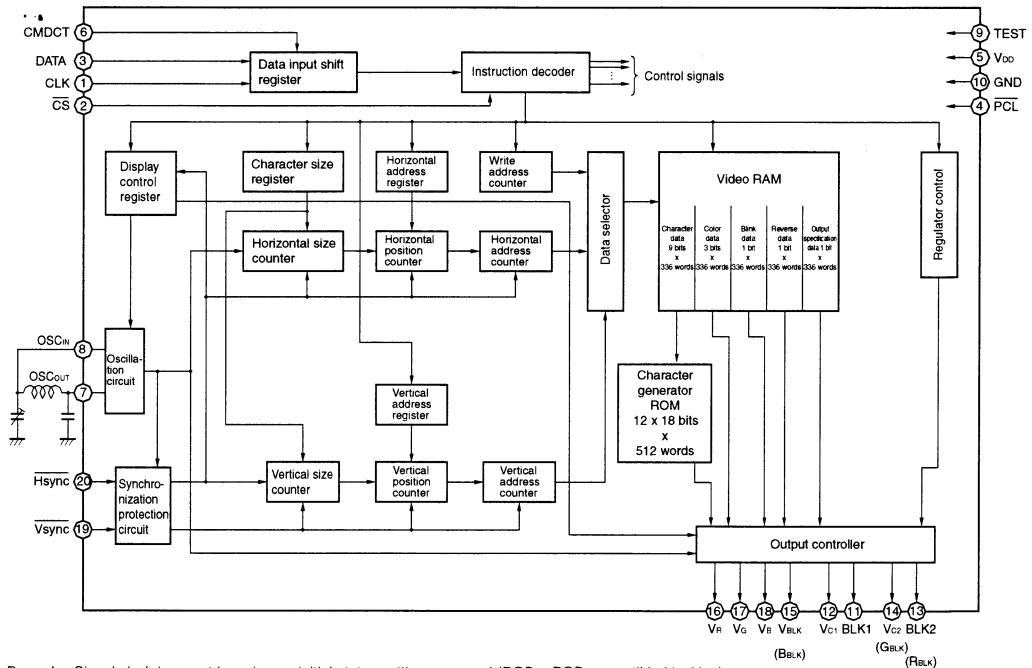


■ UPD6467GR-533-X [NEC]
(ON-SCREEN CHARACTER DISPLAY)



(Top View)

BLOCK DIAGRAM



Remark Signals in () are set by using an initial status setting command (RGB + RGB compatible blanking).

SECTION 5

EXPLODED VIEW AND PARTS LIST

- **SAFETY PRECATION**

Parts identified by the $\triangle$ symbol are critical for safety.
Replace only with specified parts numbers.

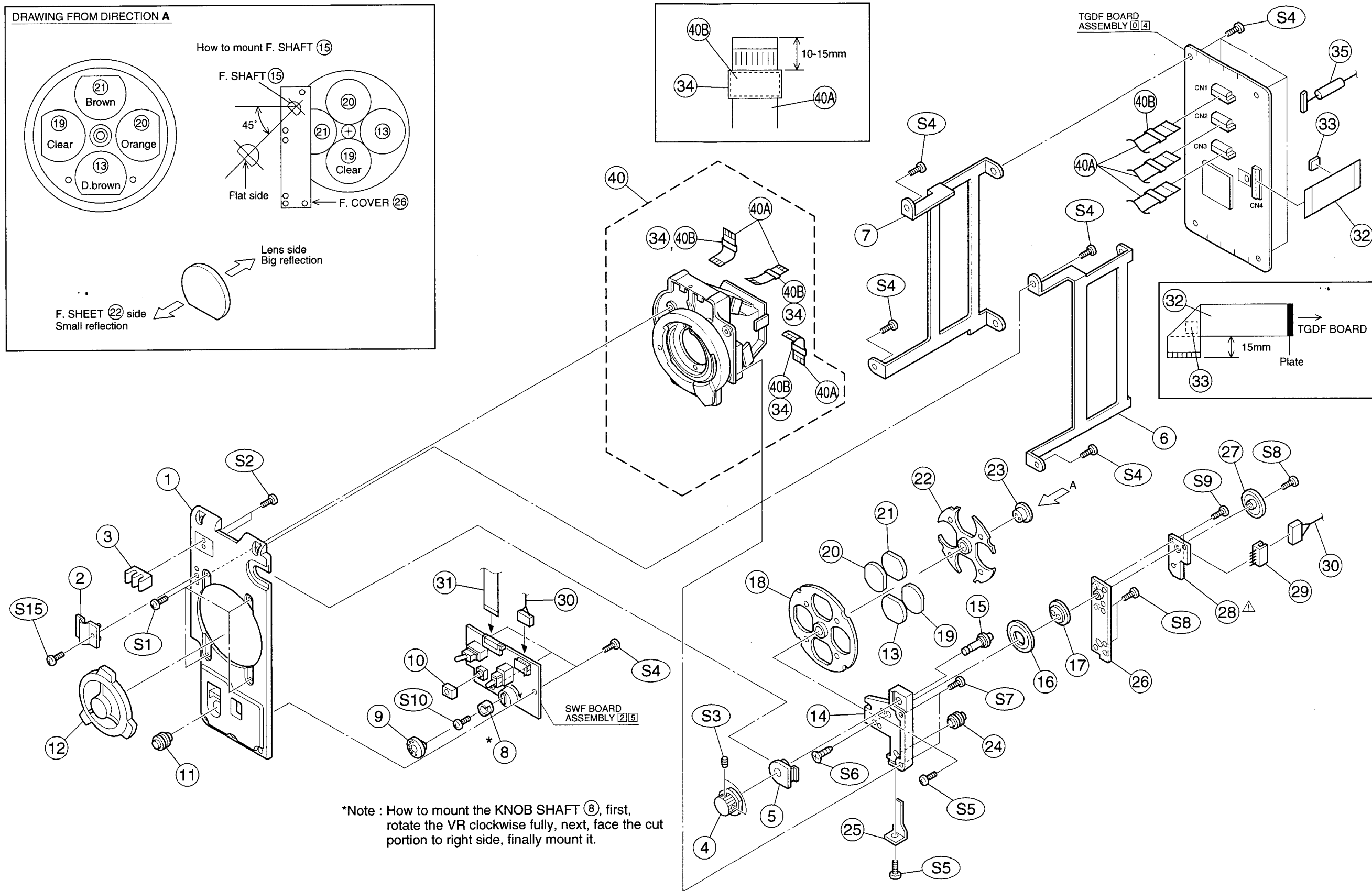
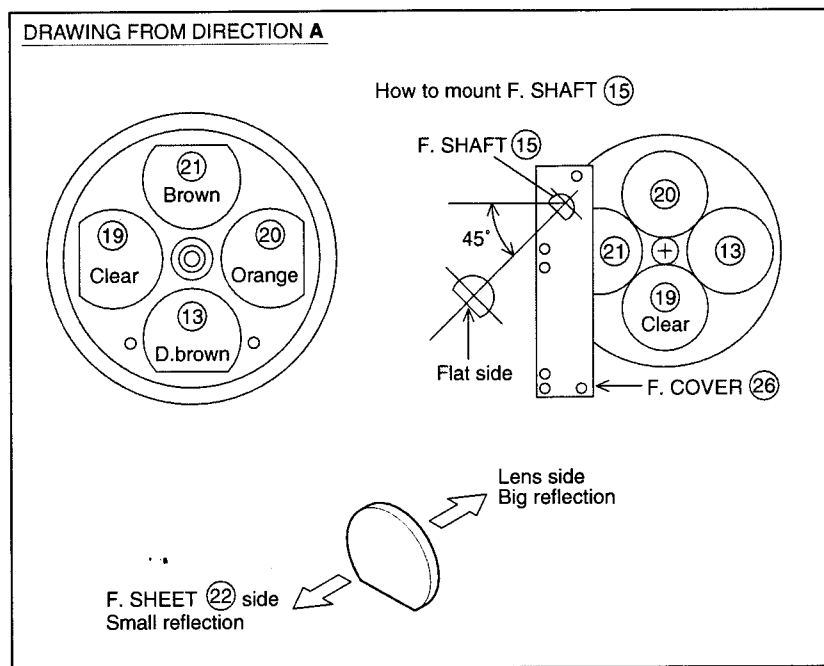
- **NOTE**

Parts not denoted by parts numbers are not supplied by JVC.

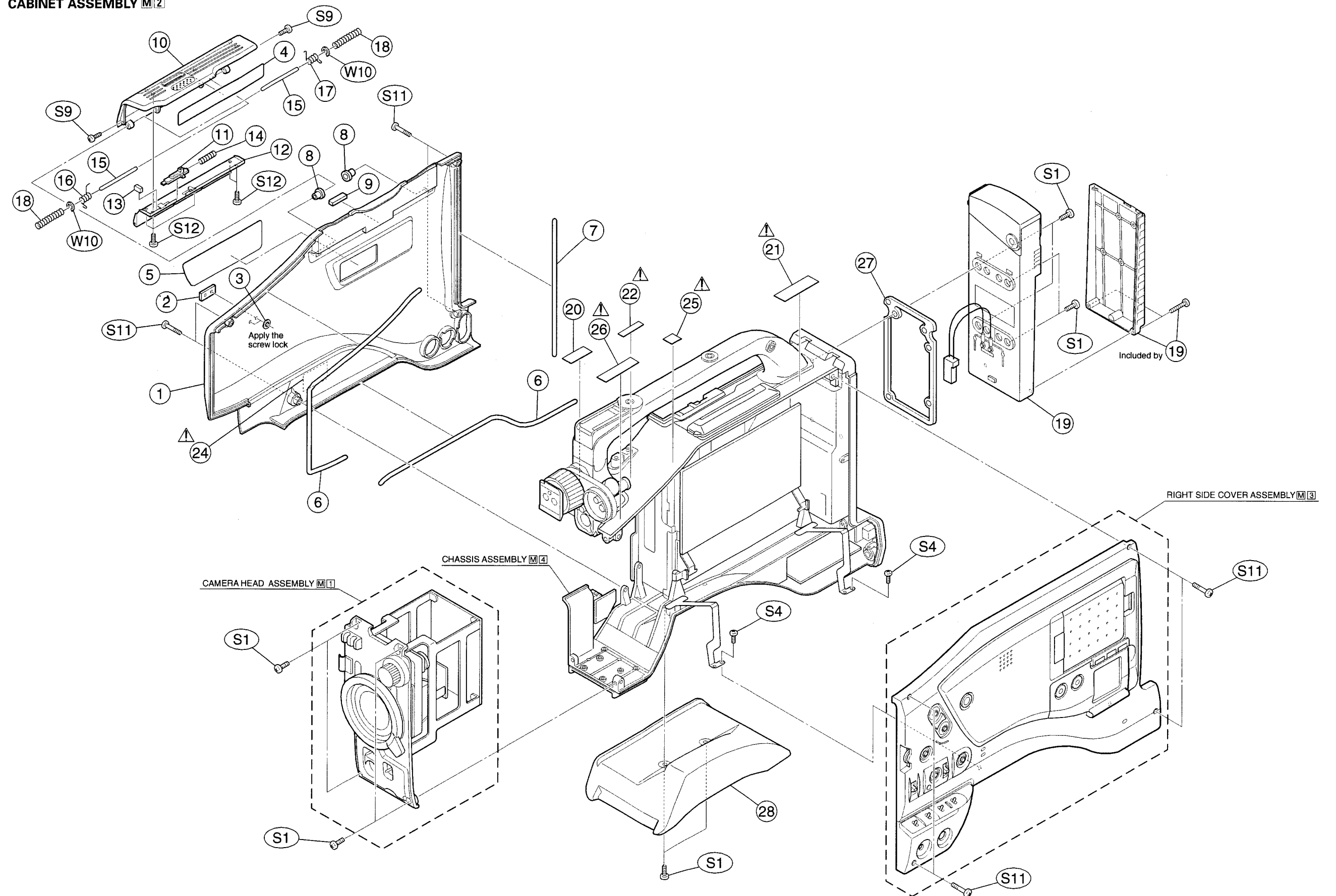
■ CAMERA HEAD ASSEMBLY PARTS LIST
M1

Symbol No.	Part No.	Part Name	Description
1	LW10065-001B	FRONT FRAME	
2	SC46668H-001	CABLE HOLDER	
3	SC42550H-011	C.HOLDER	
4	SC31363H-011	FILTER KNOB	
5	SC46517H-001	GEAR HOLDER	
6	LW30322-001A-H	TG.BRACKET(1)	
7	LW30323-001A-H	TG.BRACKET(2)	
8	SC46536H-001	KNOB SHAFT	
9	SC46518H-001	VR.KNOB	
10	SC46422H-001	CUSHION	
11	SC44828H-011	KNOB	VTR TRIG.
12	SC43825H-002	LENS CAP	
13	SC43842-004	FILTER(4)	D.BROWN,1/64ND
14	SC32308H-001	FILTER BASE	
15	SC46524H-001	F.SHAFT	
16	SC46523-001	F.I.GEAR	
17	SC44491H-001	F.I.SHAFT	
18	LW30335-001A-H	FILTER WHEEL	
19	SC43840-001	FILTER(1)	CLEAR,3200K
20	SC43841-001	FILTER(2)	ORANGE,5600K
21	SC43842-002	FILTER(3)	BROWN,1/8ND
22	LW40342-001A-H	F.SHEET	
23	SC45539H-002	F.W.SHAFT	
24	SC44482-002	F.STOPPER	
25	SC44511-002	F.SPRING	
26	SC32309H-001	FILTER COVER	
27	SC44676H-005	FILTER CAP ASSY	
28	SC83183-004	FILTER BOARD	
29	QGA1501C1-05	CONNECTOR	
30	QJJ027-051201	WIRE	CN10 SWF-FL
31	SCV2337-1028BD	FFC	CN33 DBCP-SWF
32	SCV2803-5010B	FFC	CN4 DBCP-TGDF
33	PRD42674	SHIELD CUSHION	CN4 DBCP-TGDF
34	HZT18-UL10-3M	ZETSUEN TAPE	
35	QQR0490-001	FILTER	
40	SCM1209-N0A	OPTICAL ASS'Y	U MODEL
40	SCM1209-P0A	OPTICAL ASS'Y	E MODEL
40A	SCV2803-4007B	FFC	x3
40B	QQR1381-001	FERRITE CORE	x3
S1	QYSDSP3006M	SCREW	200 M3x6
S2	QYSDSF2006M	SCREW	200 M2x6
S3	QYYASPR3004M	SCREW	200 M3x4
S4	QYSDSP2604Z	SCREW	200 M2.6x4
S5	QYSPSPT2030M	SCREW	200 M2x30
S6	QYSSSPT2040M	SCREW	200 M2x4.0
S7	SC43397H-009	SCREW	200
S8	QYSPSPT2050M	SCREW	200 M2x50
S9	QYSPSPT2040M	SCREW	200 M2x40
S10	QYSPSPT1730M	SCREW	200 M1.7x30
S15	QYSDSP2604M	SCREW	200 M2.6x4

5.1 CAMERA HEAD ASSEMBLY M1



5.2 CABINET ASSEMBLY M 2



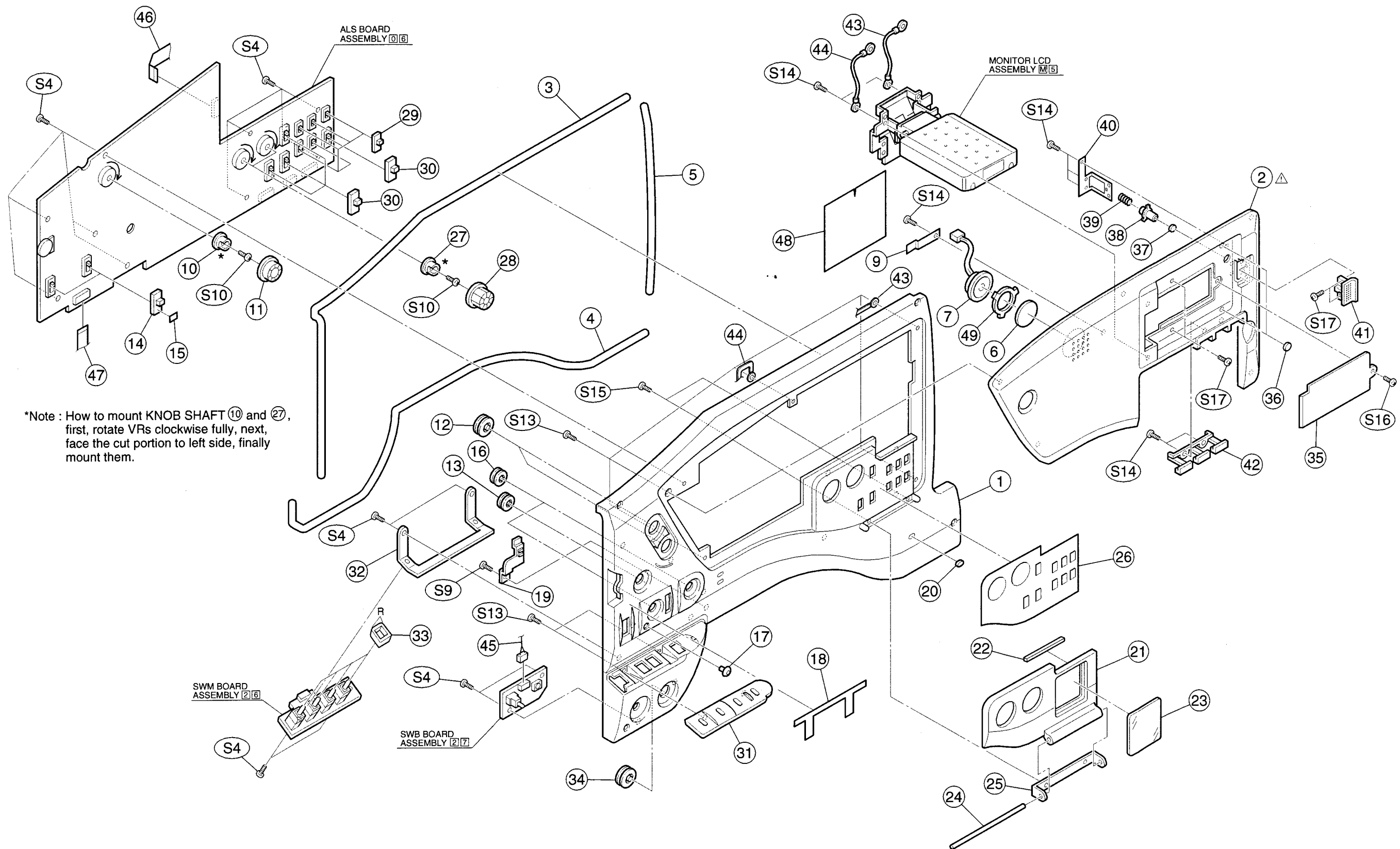
■ CABINET ASSEMBLY PARTS LIST
M 2 M M

Symbol No.	Part No.	Part Name	Description
1 2 3 4 5	LW10070-002C - QYNSS2000P LL40390-002A LW30329-001A-H	L.SIDE COVER MARK (JVC) P SPRING NUT LABEL ESCUT.PLATE	LW40363-001A x2
6 7 8 9 10	SC46410-225 SC46410-110 SC46549H-001 LW40404-001A-H LW20086-001B-H	GASKET GASKET BUSHING CUSHION CASSETE COVER	x2 x2
11 12 13 14 15	LW30330-001A-H LW30324-001A-H LW40385-001A-H LW40366-001B-H SC46543H-001	LOCK KNOB COVER BRACKET CUSHION SPRING(2) HINGE SHAFT	 x2
16 17 18 19 20	LW40382-001A-H LW40382-002A-H SC46546H-001 SCV2978-002 -	TORSION SPRING TORSION SPRING COMPRESS SPRING BATTERY HOLDER NAME PLATE	 x2
△ △ △ △ △	21 SC43658H-001 22 SC46608H-021 24 QZL1001-012 25 SC45925H-001 26 SC46698H-001	CAUTION LABEL CAUTION LABEL UL LABEL CE LABEL CAUTION LABEL	U MODEL U MODEL E MODEL E MODEL
 S1 S4 S9	27 SC46521H-001 28 LW10076-001B QYSDSP3006M QYSDSP2604Z QYSPSPT2040M	BH CUSHION SHOULDER PAD SCREW SCREW SCREW	 M3x6 M2.6x4 M2x40
S11 S12 W10	SC43397H-008 QYSDSF2004M QYREE1200X	SCREW SCREW E RING	M2x4

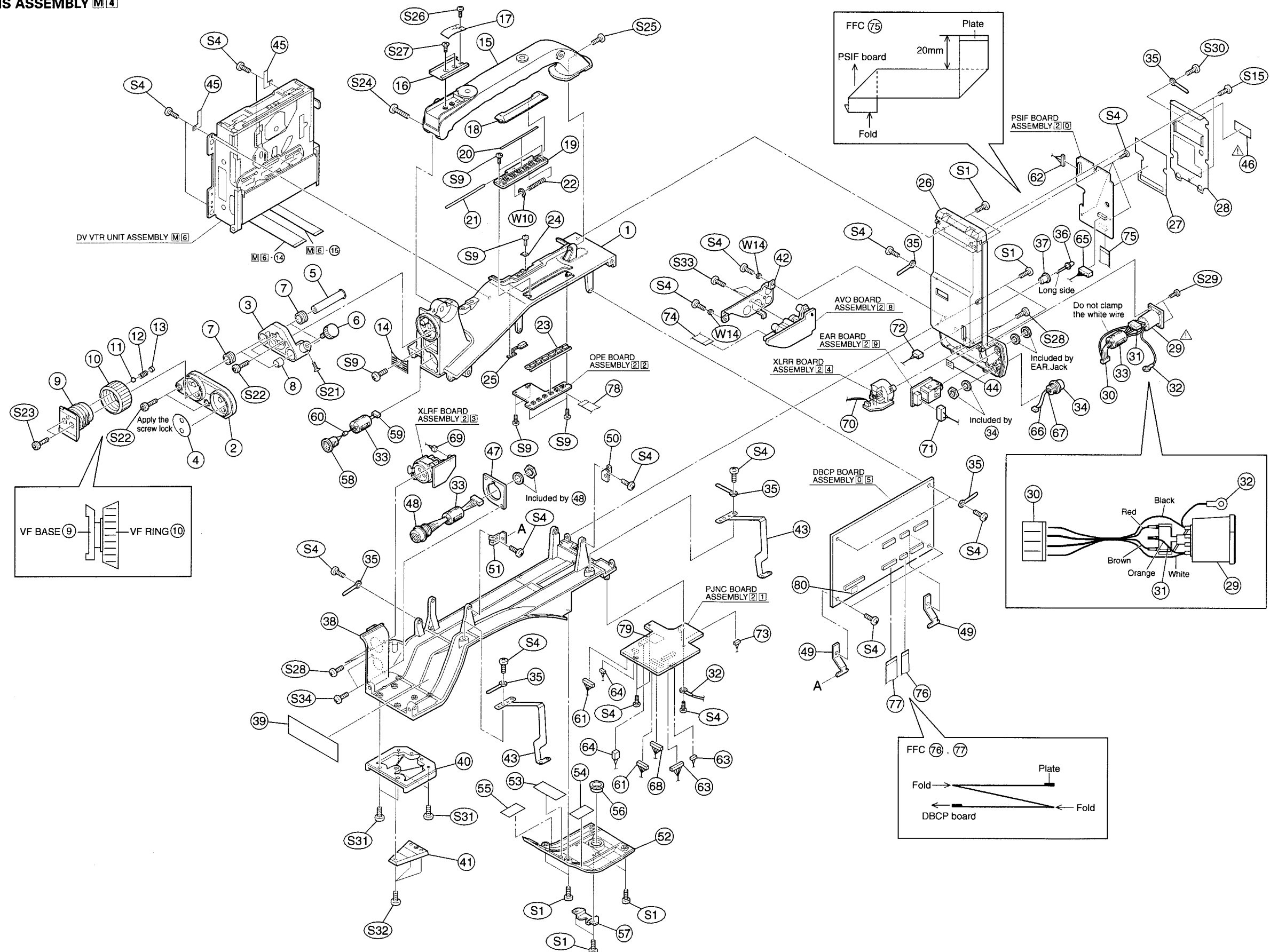
RIGHT SIDE COVER ASSEMBLY PARTS LIST
M 3 M M

Symbol No.	Part No.	Part Name	Description
△	1 LW10069-001B	R.SIDE COVER	
	2 LW10073-001A-H	CHEEK PAD	
	3 SC46410-370	GASKET	
	4 SC46410-340	GASKET	
	5 SC46410-120	GASKET	
	6 SC46228H-001	SHEET	
	7 QAS0063-001	SPEAKER	
	9 LW40216-001B-H	SP BRACKET	
	10 LW40327-001A-H	KNOB SHAFT	MONITOR
	11 SC46537H-001	VR.KNOB	MONITOR
	12 LW40330-001A-H	SWITCH CAP	EDIT SEARCH, x2
	13 LW40328-001A-H	SWITCH CAP	STATUS
	14 LW40329-001A-H	SLIDE KNOB	IRIS/BLACK,x2
	15 SC46397-001	PLATE	IRIS/BLACK,x2
	16 SC45246H-001	KNOB	F.AUTO/LOLUX,x2
	17 SC43451-001	LED LENS	
	18 LW40358-001B-H	LABEL	
	19 LW30341-001B-H	LED PLATE	
	20 SC46357H-001	CUSHION	
	21 LW20083-001A-H	PANEL COVER	
	22 LW40332-001A-H	RUBBER MAGNET	
	23 LW40333-001A-H	PANEL WINDOW	
	24 LW40334-001A-H	PANEL SHAFT	
	25 LW40335-001A-H	SHAFT HOLDER	
	26 LW30320-001A-H	AUDIO PANEL	
	27 SC46536H-001	KNOB SHAFT	AUDIO LEVEL, x2
	28 SC32289H-001	VOL.KNOB	AUDIO LEVEL, x2
	29 SC45245H-011	SLIDE KNOB	AUDIO IN/SEL,x5
	30 SC46796H-001	SLIDE KNOB	MONI/A.IN/TC,x4
	31 LW30319-001B-H	SW.NAME PLATE	
	32 LW40331-001A-H	BOARD BRACKET	
	33 LW40383-001A-H	CUSHION	x4
	34 SC44828H-011	KNOB	VTR
	35 LW30321-001A-H	R COVER	
	36 LW40188-001A-H	CUSHION	x2
	37 LW40188-002A-H	CUSHION	
	38 LW40336-001A-H	RELEASE KNOB	
	39 LW40185-001A-H	RELEASE SPRING	
	40 LW40187-001B-H	LOCK SPRING	
	41 LW30339-001A-H	LOCK KNOB	
	42 LW30340-001B-H	LCD KNOB	
	43 QUB138-11RLRL	LUG WIRE ASS'Y	LCD-RSIDE COVER
	44 QUB130-08RLRL	LUG WIRE ASS'Y	LCD-RSIDE COVER
	45 QJJ031-030613	WIRE	CN41 ALS-SWB
	46 SCV2803-3010B	FFC	CN303 ALS-M.RLY
	47 SCV2337-0805BD	FFC	CN28 ALS-SWM
	48 LW40412-001A-H	SHEET	
	49 LW40410-001A-H	SHEET	
	S4 QYSDSP2604Z	SCREW	M2.6x4
	S9 QYSPSPT2040M	SCREW	M2x40
	S10 QYSPSPT1730M	SCREW	M1.7x30
	S13 QYSDSF2606Z	SCREW	M2.6x6
	S14 QYSPSFU2050Z	SCREW	M2x5.0
	S15 QYSDSP2604M	SCREW	M2.6x4
	S16 QYSPSFU2050M	SCREW	M2x5.0
	S17 LY30018-099A	SCREW	

5.3 RIGHT SIDE COVER ASSEMBLY



5.4 CHASSIS ASSEMBLY M 4



■ CHASSIS ASSEMBLY PARTS LIST
M4MM

Symbol No.	Part No.	Part Name	Description
1	LW10067-001B	TOP FRAME	
2	LW30342-001B	VF S BASE	
3	LW30343-001B	VF H BASE	
4	LW40386-001A-H	CAP	
5	LW40350-001A-H	PIPE	x2
6	LW40351-001A-H	L SCREW	
7	LW40352-001A-H	STOPPER	x4
8	LW40353-001A-H	S PLATE	
9	SC31861H-001-K	VF BASE	
10	SC45127H-002	VF RING	
11	SC40465H-045	STEEL BALL	
12	LW40395-001A-H	LOCK SPRING	
13	LW40374-001A-H	CUSHION	
14	SC46531H-001	A.PLATE	
15	LW10077-001B-H	HANDLE	
16	SC40886H-001	SHOE	
17	C40936	SPRING	
18	LW30327-001A-H	OPE.COVER(U)	
19	LW30328-001A-H	OPE.COVER(B)	
20	SC46527H-011	OPE.PANEL	
21	LW40340-001A-H	OPE.SHAFT	
22	SC46532H-001	SPRING(1)	
23	SC32307H-002	OPE.KNOB	
24	LW40341-001A-H	LOCK BRACKET	
25	LW30331-001B-H	EJECT KNOB	
26	LW10068-001B	REAR FRAME	
27	LW40362-001A-H	PLATE	
28	LW30325-001B-H	REAR PLATE	
29	QNZ0429-001	DC IN CONNECTOR	
30	WJM0324-001B	WIRE	
31	QUB143-03A3A3	WIRE	
32	QUB135-06QLA2	LUG WIRE ASS'Y	
33	QQR0490-001	FILTER	x3
34	QNZ0257-001	RECEPTACLE(4S)	DC OUT CONN.
35	PU49485-3	WIRE CLAMP	x7
36	SLR-56VR3F	L.E.D.	BACK TALLY
37	SM3512	L.E.D.MOUNT	FOR BACK TALLY
38	LW10066-001B	BOTTOM FRAME	
39	LW40392-001A-H	SHEET 4	
40	SC32367H-001	FRONT BASE	
41	LW30353-001A-H	SHOE	
42	LW30326-001B-H	CN BRACKET	
43	LW40375-001A-H	HINGE	x2
44	LW40411-001A	CUSHION	FOR DV TERMINAL
45	LW40393-001A-H	SHIELD	x2
46	SC45456-001	LABEL	U MODEL
47	SC46554H-001	LENS BRACKET	
48	SCV3022-020	LENS CONNECTOR	CN35 DBCP-LENS
49	SC46545H-001	BOARD HOLDER	x2
50	SC46584H-001	STAY(1)	
51	SC46584H-002	STAY(2)	
52	LW10071-001B	BOTTOM COVER	
53	LW40389-001A-H	SHEET 1	
54	LW40390-001A-H	SHEET 2	
55	LW40391-001A-H	SHEET 3	
56	SC46519H-001	KNOB	FOR BREAKER
57	SC46670H-001	REAR BASE	
58	SCV0238-06S	VF CONNECTOR	
59	WJR0030-001B	WIRE	
60	QWTE200-010	SHRINK TUBE	x6
61	WJZ0107-001B	WIRE	CN8/9 DBCP-PJNC
62	WJJ0371-001A	WIRE	CN15 PJNC-PSIF
63	WJZ0108-001B	WIRE	CN16 PJNC-TGDF/CN111 PJNC-UNIT
64	WJZ0106-001A	WIRE	CN20 PJNC-REM/CN19 PJNC-BATT.
65	WJJ0372-001A	WIRE	CN18 PJNC-PSIF

M 3 M M □ □ □ □

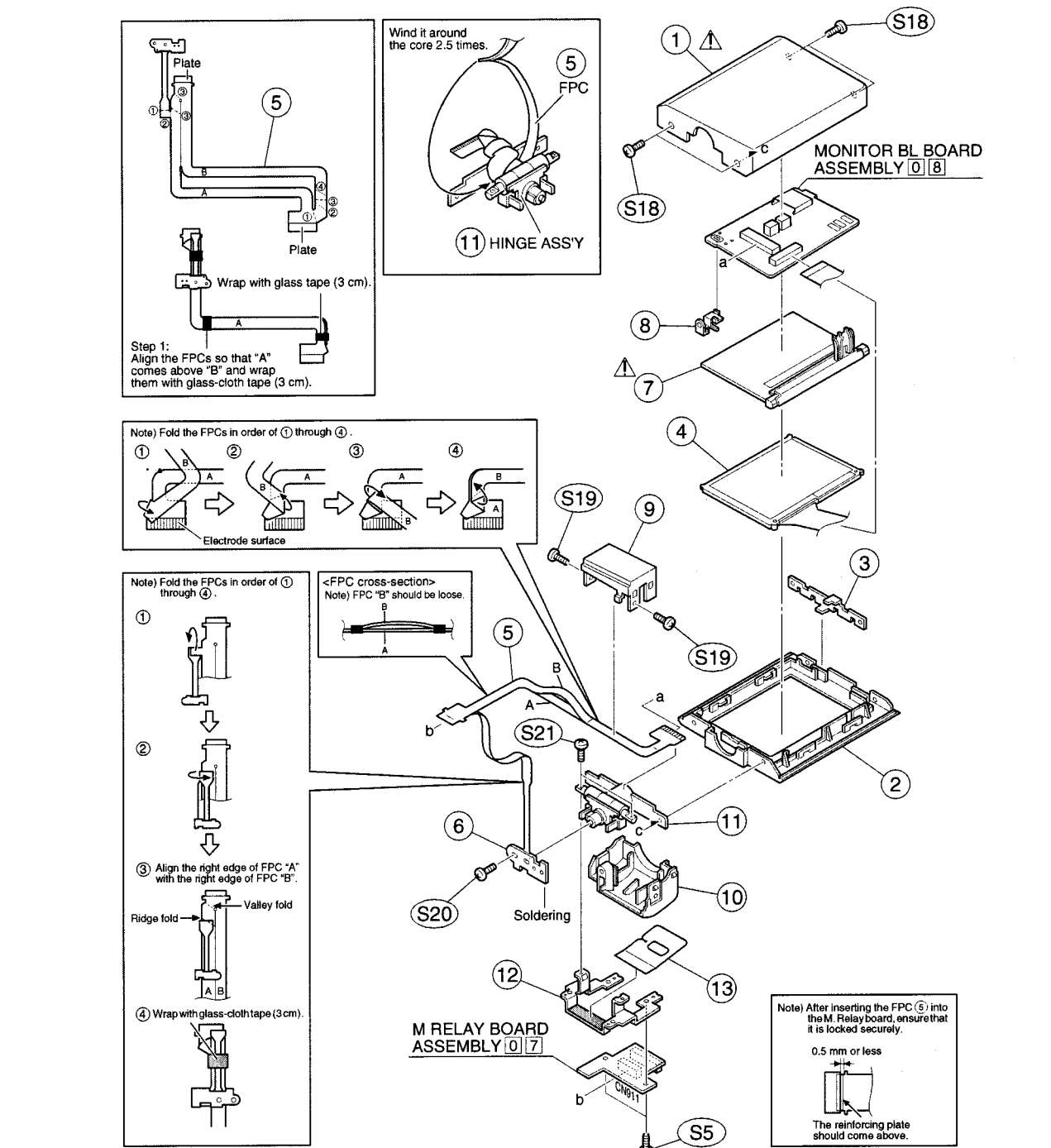
Symbol No.	Part No.	Part Name	Description
66	WJM0325-001B	WIRE	CN22 PJNC-DCOUT
67	QWTA13H-015	VINYL TUBE	x2
68	QJJ020-101210	WIRE	CN29 PJNC-ALS
69	WJN0100-001A	WIRE	CN30 ALS-XLRF
70	QJN017-032401	WIRE	CN31 ALS-XLRR
71	QJJ031-053020	WIRE	CN38 ALC-EAR
72	QJJ025-020812	WIRE	CN40 PJNC-BKTLY
73	QJN027-061411	WIRE	CN101 PJNC-UNIT
74	SCV2337-1017BD	FPC	CN6 DBCP-AVO
75	QUQ105-3013AA	FFC	CN14 DBCP-PSIF
76	SCV2803-2015B	FFC	CN26 DBCP-ALS
77	SCV2803-3315B	FFC	CN27 DBCP-ALS
78	SCV2337-0615BD	FFC	CN34 DBCP-OPE
79	HZT18-UL10-3M	ZETSUEN TAPE	
80	PRD42674	SHIELD CUSHION	CN4 DBCP
S1	QYSDSP3006M	SCREW	M3x6
S4	QYSDSP2604Z	SCREW	M2.6x4
S9	QYSPSP2040M	SCREW	M2x40
S15	QYSDSP2604M	SCREW	M2.6x4
S21	LY30018-089A	SCREW	
S22	QYYYSP4010M	BOLT	M4x10
S23	QYYYSP4025M	BOLT	M4x25
S24	QYSPSP5020M	SCREW	M5x20
S25	QYSPSP5012M	SCREW	M5x12
S26	QYSPSP2004N	SCREW	M2x4
S27	QYSSSP3006N	SCREW	M3x6
S28	QYSPSP3008M	SCREW	M3x8
S29	QYSPSP2606N	SCREW	M2.6x6
S30	QYSDST2605M	SCREW	M2.6x5
S31	QYSSSP4006N	SCREW	M4x6
S32	QYSDSP4006N	SCREW	M4x6
S33	QYSDSF3006M	SCREW	M3x6
S34	SC46625H-001	SCREW	
W10	QYREE1200X	E RING	
W14	QYWBS285803N	WASHER	

■ MONITOR LCD ASSEMBLY PARTS LIST M 5

M 5 M M □ □ □ □

Symbol No.	Part No.	Part Name	Description
△ 1	LW10074-001B-H	MONITOR COVER	
2	LW10075-001A-H	MONITOR CASE	
3	LW40349-001A-H	LCD BRACKET	
4	QLD0139-001	LCD MODULE	
5	QAL0222-001	FPC	
△ 6	NSW0095-001	DETECT SWITCH	
7	QLL0086-002	BACK LIGHT	
8	LW40190-001A-H	EARTH PLATE	
9	LW20084-001A-H	HINGE COVER1	
10	LW20074-001C-H	HINGE COVER2	
11	LY32079-001A	HINGE ASSEMBLY	
12	LW30350-001A-H	HINGE BRACKET	
13	LW40372-001A-H	SHEET	
S5	QYSPSP2030M	SCREW	M2x30
S18	LY30018-042A	SCREW	
S19	LY30018-058A	SCREW	
S20	LY30018-059A	SCREW	
S21	LY30018-089A	SCREW	

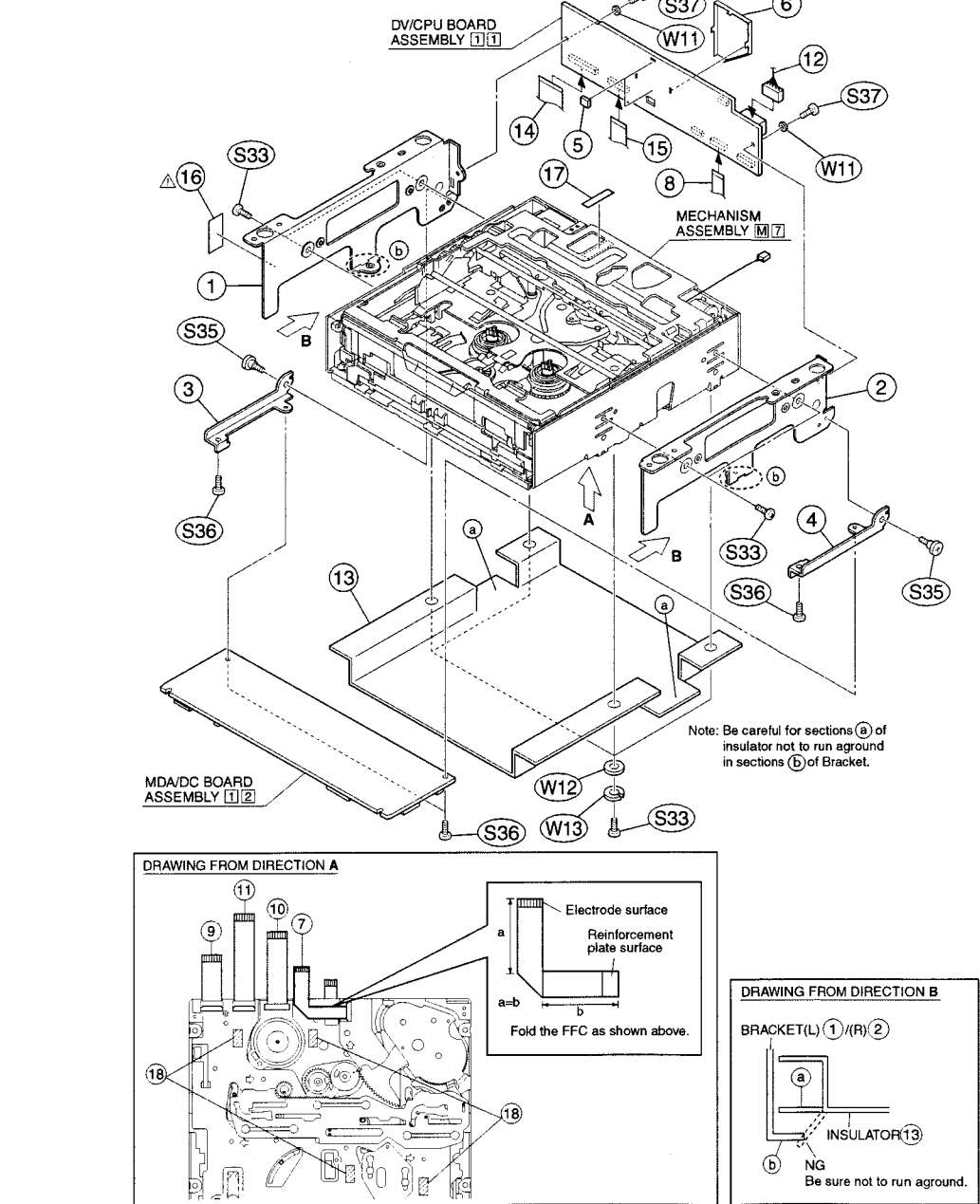
5.5 MONITOR LCD ASSEMBLY M 5



■ DV VTR UNIT ASSEMBLY PARTS LIST M 6

Symbol No.	Part No.	Part Name	Description
1	LL30314-001C-H	BRACKET (L)	
2	LL30315-001C-H	BRACKET (R)	
3	LL30316-001A-H	SUB BRACKET(L)	
4	LL30317-001A-H	SUB BRACKET(R)	
5	PRD30030-36	PAD	x2
6	LL40377-001A-H	SHIELD CASE	FOR DV/CPU
7	QUQ105-1305AA	FFC	DVC104-MECHA104
8	QUQ105-2609AA	FFC	DVC105-MDA105
9	QUQ105-2004AA	FFC	DVC106-MECHA106
10	QUQ105-1804AA	FFC	MDA113-CAP.M

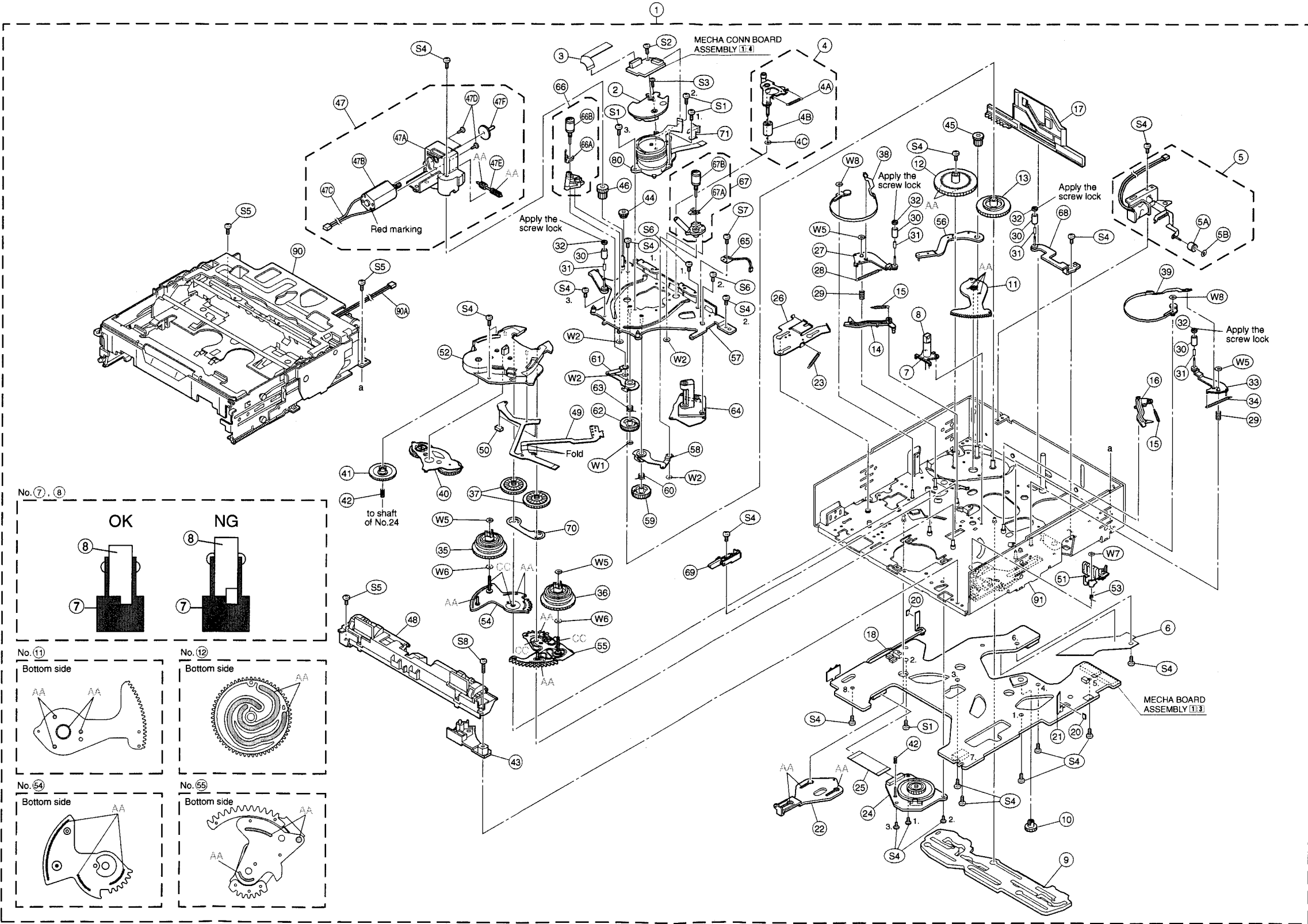
5.6 DV VTR UNIT ASSEMBLY M 6



■ DV VTR UNIT ASSEMBLY PARTS LIST M 6

Symbol No.	Part No.	Part Name	Description
11	QUQ105-2004AA	FFC	MDA116-MECHA116
12	QJJ027-081203	WIRE	DVC108-MDA108
13	LW30365-001A-H	INSULATOR	
14	QUQ105-4512AA	FFC	CN103 DBCP-UNIT
15	QUQ105-3013AA	FFC	CN102 DBCP-UNIT
16	SC45456-001	LABEL	U MODEL
17	-	LABEL	IEEE1394 ID
18	LW40415-001A	CUSHION	
S33	QYSPSP3003Z	SCREW	M3x3
S35	PRD44099	SCREW	
S36	QYSDSP2004Z	SCREW	M2x4
S37	QYSPSPM2003Z	SCREW	M2x3
W11	QYWSS225003N	WASHER	
W12	QYWSS327005N	WASHER	
W13	QYWLS315907N	WASHER	

5.7 MECHANISM ASSEMBLY M7



Classifi- cation	Part No.	Symbol in drawing
Grease	KYODO-SH-P	AA
Oil	YTU94027	CC

NOTES: • This section indicates that the grease and oil are to be applied on locations marked with AA and CC.
During checking and servicing, check if grease has been applied on the locations marked with AA and oil on the locations marked with CC.
• Apply also grease and oil on some locations in the main cam gear and the cam groove at the rear side of the sub cam gear.

MECHANISM ASSEMBLY PARTS LIST
M7MM

Symbol No.	Part No.	Part Name	Description
1	LL30247-001A	MECHANISM ASS'Y	
2	LL20081-001A	TAPE GUARD	
3	WJT0085-001A	WIRE	
4	LL40370-001A	P.ARM F.ASS'Y	
4A	LL40357-001A	TEN.SPRING(P.A)	
4B	LL40313-001A	PINCH ROLLER	
4C	LY40382-001A	P.ROLLER CAP	
5	LL40371-001A	H.CLEANER ASS'Y	
5A	LY41249-001A	HEAD CLEANER SA	
5B	QYWDM0802725	SLIT WASHER	
6	LL40341-001A	GUIDE SHEET	
7	LL30257-001A	LED HOLDER	
8	LN59	L.E.D.	
9	LL20071-001A	CTL.PLATE	
10	LL30254-001A	M.SENSOR GEAR	
11	LL30260-001B	ARM GEAR	
12	LL20072-001A	MAIN CAM	
13	LL40241-001A	P.CAM GEAR	
14	LL30258-001A	SUP REEL LOCK	
15	LL40352-001A	TEN.SPRING(R.L)	x2
16	LL30259-001A	TU REEL LOCK	
17	LL30262-001A	PINCH PLATE	
18	NAL0015-001	FPC 2 ASSEMBLY	
20	CPT-230-X	PH.TRANSISTOR	x2
21	NAL0016-001	FPC 3 ASSEMBLY	
22	LL30255-001A	F.LOCK LEVER	
23	LL40351-001A	TEN.SPRING(FLL)	
24	QAR0247-001	REEL MOTOR	
25	WJT0084-001A	FFC	
26	LL30256-001B	SW LEVER	
27	-	SUP TEN.ARM SA.	LL30263-001A (*1)
28	LL40259-001B	TEN.SPRING(STA)	
29	LL40362-001A	COMP.SPRING	x2
30	LL40325-001A	GUIDE ROLLER	x4
31	LL40326-001A	COLLAR	x4
32	LL40327-001A	FLANGE	x4
33	-	TU TEN.ARM SA.	LL30265-001B (*1)
34	LL40353-001A	TEN.SPRING(TTA)	
35	LL30281-001A	SUP R.DISK ASSY	
36	LL30284-001A	TU R.DISK ASS'Y	
37	LL40261-001A	CONN.GEAR ASS'Y	x2
38	LL40293-001A	SUP T.BAND ASSY	
39	LL40300-001A	TU T.BAND ASS'Y	
40	LL40345-001A	IDLER ARM ASS'Y	
41	LL30272-001A	EMERGENCY GEAR	
42	LL40354-001A	COMP.SPRING(E.G)	
43	LL30303-001A	MIC GUIDE	
44	LL40242-001A	GEAR 1	
45	LL40243-001A	GEAR 2	
46	LL40244-001A	WORM WHEEL 2	
47	LL40245-001A	M.MOTOR ASS'Y	
47A	LL10068-001A	MOTOR BRACKET	
47B	LL40246-001A	MODE MOTOR SA	
47C	WJM0310-001A	WIRE	
47D	QYSPSPL2003Z	SCREW	M2x3

***1 : These parts can not be replaced individually. To replace them, please replace the MECHANISM assembly.**

Symbol No.	Part No.	Part Name	Description
47E 47F 48 49 50	LL40248-001A LL40252-001A LL20087-001B NAL0014-001A CNB1001001V1-X	WORM ASSEMBLY E.GEAR(MODE) CA.GUIDE ASS'Y FPC 1 ASSEMBLY I.C.(PH SENSOR)	x2
51 52 53 54 55	QNZ0586-001 LL10067-001B LL40356-001A LL40316-001A LL40319-001A	M.I.C.CONNECTOR IDLE COVER TORSION SPRING S.R.PLATE ASS'Y T.R.PLATE ASS'Y	
56 57 58 59 60	LL40368-001A - LL40273-001A LL30273-001A LL40277-001A	CTL.ARM ASS'Y SUB DECK ASS'Y TU L.ARM ASS'Y TU L.GEAR T.SPRING(T.L.G)	LL20076-001A (*1)
61 62 63 64 65	LL40278-001A LL30274-001A LL40282-001A QAR0248-001 QSD0006-001	SUP L.ARM ASS'Y SUP L.GEAR T.SPRING(S.L.G) CAPSTAN MOTOR DEW SENSOR	
66 66A 66B 67 67A	LL30275-001A LL30277-001A LL40284-001A LL30278-001A LL30280-001A	SUP P.BASE ASSY SUP P.B.PLATE G.ROLLER ASS'Y TU P.BASE ASS'Y TU P.B.PLATE	
67B 68 69 70 71	LL40284-001A - LL40324-001A LL30306-001A LL30339-001A	G.ROLLER ASS'Y E.G.R.ARM ASS'Y M.C.B.PIN ASS'Y LEAF PLATE TU TAPE GUARD	LL40292-001A (*1)
80 90 90A 91 S1	YDV2103A LL20064-001A WJM0311-001A - QYSPSPU1735N	DRUM ASSEMBLY C.HOUSING ASS'Y WIRE MAIN DECK ASS'Y SCREW	LL20063-001B (*1) M1.7x3.5
S2 S3 S4 S5 S6	QYSDSG2004N QYSPSPU1430M QYSPSPU1725M QYSDSP2005Z QYSDSP2003Z	SCREW SCREW SCREW SCREW SCREW	M2x4 M1.4x3.0 M1.7x2.5 M2x5 M2x3
S7 S8 W1 W2 W5	YQ43893 QYSDSP2012Z QYWDL163525 QYWDM254725 QYWDM082525	SCREW SCREW SLIT WASHER SLIT WASHER SLIT WASHER	M1.4x2 M2x12
W6 W7 W8	QYWFM123025 QYWDM082025 QYWDM123025	WASHER SLIT WASHER SLIT WASHER	

***1 : These parts can not be replaced individually. To replace them, please replace the MECHANISM assembly.**

SECTION 6

ELECTRICAL PARTS LIST

SAFETY PRECAUTION:

Parts identified by the $\triangle$ symbol are critical for safety. Replace only with specified parts numbers.
For maximum reliability and performance, all other replacement parts should be identical to those specified.

NOTE:

- Parts not denoted by parts numbers are not supplied by JVC.
- Abbreviations in this list are as follows:

RESISTORS

In the "Description" column:

All resistance values are in ohms (Ω).
k expresses kilo-ohm (1 000 ohms, k Ω).
M expresses mega-ohm (10^6 ohms, M Ω).

In the "Parts Name" column:

CAR.RESISTOR : Carbon Resistor
C.M.F.RESISTOR : Constant Metalized Film Resistor
COMP.RESISTOR : Composition Resistor
FUSI.RESISTOR : Fusible Resistor
M.F.RESISTOR : Metal Film Resistor
M.G.RESISTOR : Metal Graze Resistor
M.P.RESISTOR : Metal Plate Resistor
O.M.F.RESISTOR : Oxide Metalized Film Resistor
TRIM.RESISTOR : Trimerer Resistor
U.F.RESISTOR : Non-inflammable Resistor
VAL.RESISTOR : Valiable Resistor
W.W.RESISTOR : Wire Wound Resistor

CAPACITORS

In the "Description" column:

All capacitance values are in microfarad (μ F) unless otherwise indicated.
p expresses picofarad (10^{-12} farad, pF).

In the "Parts Name" column:

CER.CAPACITOR : Ceramic Capacitor
E.CAPACITOR : Electrolytic Capacitor
FILM CAPACITOR : Film Capacitor
M.F.CAPACITOR : Metalized Film Capacitor
MICA CAPACITOR : Mica Capacitor
MPP CAPACITOR : Metalized PolyPropylene Capacitor
MPPS CAPACITOR : Metalized PolyPhenylene Sulfied film Capacitor
M.M.CAPACITOR : Metalized Mylar Capacitor
MYLAR CAPACITOR : Mylar Capacitor
N.P.CAPACITOR : Non-Poler electrolytic Capacitor
P.P.CAPACITOR : PolyPropylene Capacitor
PPS CAPACITOR : PolyPhenylene Sulfied film Capacitor
P.S.CAPACITOR : PolyStyrene Capacitor
TAN.CAPACITOR : Tantal Capacitor
TRIM.CAPACITOR : Trimer Capacitor
VAL.CAPACITOR : Valiable Capacitor

Note: In the "Description" column of the parts list, (U) means the parts for the U version while (E) is for the E version.

Symbol No.	Part No.	Part Name	Description
IC1	SCV1585-064	I.C.(M)	JVC (U) ← for U version
	SCV1585-067	I.C.(M)	JVC (E) ← for E version

6.1 ISB BOARD ASSEMBLY PARTS LIST 01

CK269800B1

01

Symbol No.	Part No.	Part Name	Description
IC2 IC3	AD9849AKST-W MN3112SA-X	I.C.(M) I.C.(M)	ANALOG DEVICES MATSUSHITA
SK1	QNV0027-010	IC SOCKET	FOR IC1
Q1 Q2	2SC4626/BC-X 2SC4626/BC-X	TRANSISTOR TRANSISTOR	MATSUSHITA MATSUSHITA
D1	MA142A-X	DIODE	MATSUSHITA
R1 R5 R6 R7 R12 R13 R14 R15	NRSA63J-105X NRSA63J-682X NRSA63J-822X NRSA63J-822X NRSA63J-104X NRSA63J-821X NRSA63J-0R0X NRSA63J-0R0X	M.G.RESISTOR M.G.RESISTOR M.G.RESISTOR M.G.RESISTOR M.G.RESISTOR M.G.RESISTOR M.G.RESISTOR M.G.RESISTOR	1M 6.8k 8.2k 8.2k 100k 820 0 0 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W
RA1 RA2 RA3	NRZ0015-101X NRZ0015-101X NRZ0015-101X	RESISTOR ARRAY RESISTOR ARRAY RESISTOR ARRAY	100 100 100
C1 C2 C3 C4 C5 C6 C7 C8 C9 C12	NBE41CM-106X NBE21AM-106X NBE21AM-106X NBE41VM-335X NBE51EM-106X NBE41CM-106X NBE21AM-106X NBE91CM-105X NBE91CM-105X NBE21AM-106X	TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR	10 10 10 3.3 10 10 10 1 1 10 16V 10V 10V 35V 25V 16V 10V 16V 10V 16V 10V
C13 C14 C15 C16 C17 C18 C51 C52 C53 C54	NBE91CM-105X NBE41VM-335X NCB11HK-224X NBE51EM-106X NBE41VM-335X NBE51EM-106X NCB31EK-473X NCB31CK-104X NCB11EK-105X NCB31EK-473X	TAN.CAPACITOR TAN.CAPACITOR CER.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR	1 3.3 0.22 10 3.3 10 0.047 0.1 1 0.047 16V 35V 50V 25V 35V 25V 25V 16V 25V 25V
C55 C56 C57 C61 C62 C63 C64 C65 C66 C67	NCB31CK-104X NCB31CK-104X NCB31EK-473X NCB11EK-105X NCB31CK-104X NCB31CK-104X NCB31CK-104X NCB31CK-104X NCB31CK-104X NCB31CK-104X	CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR	0.1 0.1 0.047 1 0.1 0.1 0.1 0.1 0.1 0.1 16V 16V 25V 25V 16V 16V 16V 16V 16V 16V
C68 C69 C70 C71 C72 C73 C74	NCB31CK-104X NCB31CK-104X NCB31CK-104X NCB31CK-104X NCB31CK-104X NCB31CK-104X NCB31CK-104X	CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR	0.1 0.1 0.1 0.1 0.1 0.1 0.1 16V 16V 16V 16V 16V 16V
CN1	QGF0508F2-40X	CONNECTOR	40PIN
TP1	NNZ0009-001X	TEST POINT	
K1 K2 K3 K4 K5	NQR0269-004X NQR0269-004X NQR0269-004X NQR0269-004X NQR0269-004X	FERRITE BEADS FERRITE BEADS FERRITE BEADS FERRITE BEADS FERRITE BEADS	

6.2 ISG BOARD ASSEMBLY PARTS LIST 02

CK269800B2

02

Symbol No.	Part No.	Part Name	Description
SK1	QNV0027-010	IC SOCKET	FOR IC1
IC2 IC3	AD9849AKST-W MN3112SA-X	I.C.(M) I.C.(M)	ANALOG DEVICES MATSUSHITA
Q1 Q2	2SC4626/BC-X 2SC4626/BC-X	TRANSISTOR TRANSISTOR	MATSUSHITA MATSUSHITA
D1	MA142A-X	DIODE	MATSUSHITA
R1 R5 R6 R7 R12 R14 R15 R63	NRSA63J-105X NRSA63J-682X NRSA63J-822X NRSA63J-822X NRSA63J-104X NRSA63J-0R0X NRSA63J-0R0X NRSA63J-821X	M.G.RESISTOR M.G.RESISTOR M.G.RESISTOR M.G.RESISTOR M.G.RESISTOR M.G.RESISTOR M.G.RESISTOR M.G.RESISTOR	1M 6.8k 8.2k 8.2k 100k 0 0 820 1/16W 1/16W 1/16W 1/16W 1/16W 1/16W
RA1 RA2 RA3	NRZ0015-101X NRZ0015-101X NRZ0015-101X	RESISTOR ARRAY RESISTOR ARRAY RESISTOR ARRAY	100 100 100
C1 C2 C3 C4 C5 C6 C7 C8 C9 C12	NBE41CM-106X NBE21AM-106X NBE21AM-106X NBE41VM-335X NBE51EM-106X NBE41CM-106X NBE21AM-106X NBE91CM-105X NBE91CM-105X NBE21AM-106X	TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR	10 10 10 3.3 10 10 10 1 1 10 16V 10V 10V 35V 25V 16V 10V 16V 10V 16V 10V
C13 C14 C15 C16 C17 C18 C51 C52 C53 C54	NBE91CM-105X NBE41VM-335X NCB11HK-224X NBE51EM-106X NBE41VM-335X NBE51EM-106X NCB31EK-473X NCB31CK-104X NCB11EK-105X NCB31EK-473X	TAN.CAPACITOR TAN.CAPACITOR CER.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR TAN.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR	1 3.3 0.22 10 3.3 10 0.047 0.1 1 0.047 16V 35V 50V 25V 35V 25V 25V 16V 25V 25V
C55 C56 C57 C61 C62 C63 C64 C65 C66 C67	NCB31CK-104X NCB31CK-104X NCB31EK-473X NCB11EK-105X NCB31CK-104X NCB31CK-104X NCB31CK-104X NCB31CK-104X NCB31CK-104X NCB31CK-104X	CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR	0.1 0.1 0.047 1 0.1 0.1 0.1 0.1 0.1 0.1 16V 16V 25V 25V 16V 16V 16V 16V 16V 16V
C68 C69 C70 C71 C72 C73 C74	NCB31CK-104X NCB31CK-104X NCB31CK-104X NCB31CK-104X NCB31CK-104X NCB31CK-104X NCB31CK-104X	CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR CER.CAPACITOR	0.1 0.1 0.1 0.1 0.1 0.1 0.1 16V 16V 16V 16V 16V 16V
CN2	QGF0508F1-40X	CONNECTOR	40PIN
TP1	NNZ0009-001X	TEST POINT	
K1 K2 K3 K4 K5	NQR0269-004X NQR0269-004X NQR0269-004X NQR0269-004X NQR0269-004X	FERRITE BEADS FERRITE BEADS FERRITE BEADS FERRITE BEADS FERRITE BEADS	

6.3 ISR BOARD ASSEMBLY PARTS LIST 03

CK269800B3

03

Symbol No.	Part No.	Part Name	Description
SK1	QNV0027-010	IC SOCKET	FOR IC1
IC2	AD9849AKST-W	I.C.(M)	ANALOG DEVICES
IC3	MN3112SA-X	I.C.(M)	MATSUSHITA
Q1	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q2	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
D1	MA142A-X	DIODE	MATSUSHITA
R1	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R5	NRSA63J-682X	M.G.RESISTOR	6.8k 1/16W
R6	NRSA63J-822X	M.G.RESISTOR	8.2k 1/16W
R7	NRSA63J-822X	M.G.RESISTOR	8.2k 1/16W
R12	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R14	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R15	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R63	NRSA63J-821X	M.G.RESISTOR	820 1/16W
RA1	NRZ0015-101X	RESISTOR ARRAY	100
RA2	NRZ0015-101X	RESISTOR ARRAY	100
RA3	NRZ0015-101X	RESISTOR ARRAY	100
C1	NBE41CM-106X	TAN.CAPACITOR	10 16V
C2	NBE21AM-106X	TAN.CAPACITOR	10 10V
C3	NBE21AM-106X	TAN.CAPACITOR	10 10V
C4	NBE41VM-335X	TAN.CAPACITOR	3.3 35V
C5	NBE51EM-106X	TAN.CAPACITOR	10 25V
C6	NBE41CM-106X	TAN.CAPACITOR	10 16V
C7	NBE21AM-106X	TAN.CAPACITOR	10 10V
C8	NBE91CM-105X	TAN.CAPACITOR	1 16V
C9	NBE91CM-105X	TAN.CAPACITOR	1 16V
C12	NBE21AM-106X	TAN.CAPACITOR	10 10V
C13	NBE91CM-105X	TAN.CAPACITOR	1 16V
C14	NBE41VM-335X	TAN.CAPACITOR	3.3 35V
C15	NCB11HK-224X	CER.CAPACITOR	0.22 50V
C16	NBE51EM-106X	TAN.CAPACITOR	10 25V
C17	NBE41VM-335X	TAN.CAPACITOR	3.3 35V
C18	NBE51EM-106X	TAN.CAPACITOR	10 25V
C51	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C52	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C53	NCB11EK-105X	CER.CAPACITOR	1 25V
C54	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C55	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C56	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C57	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C61	NCB11EK-105X	CER.CAPACITOR	1 25V
C62	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C63	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C64	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C65	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C66	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C67	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C68	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C69	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C70	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C71	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C72	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C73	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C74	NCB31CK-104X	CER.CAPACITOR	0.1 16V
CN3	QGF0508F1-40X	CONNECTOR	40PIN
TP1	NNZ0009-001X	TEST POINT	
K1	NQR0269-004X	FERRITE BEADS	
K2	NQR0269-004X	FERRITE BEADS	
K3	NQR0269-004X	FERRITE BEADS	
K4	NQR0269-004X	FERRITE BEADS	
K5	NQR0269-004X	FERRITE BEADS	

6.4 TGDF BOARD ASSEMBLY PARTS LIST 04

CK269800B4

04

Symbol No.	Part No.	Part Name	Description
IC1	XCS30XL-4TQ144C	I.C.(M)	XLINX
IC2	TLC2933IPW-X	I.C.(M)	TEXAS
IC3	ICS570B-X	I.C.(M)	ICS
IC4	MM1573AN-X	I.C.(M)	MITSUMI
IC5	MM1573AN-X	I.C.(M)	MITSUMI
IC6	TC7W34FU-X	I.C.(M)	TOSHIBA
IC7	SN74AHC245DGV-X	I.C.(M)	TEXAS
R1	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R2	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R4	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R5	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R6	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R7	NRSA63J-392X	M.G.RESISTOR	3.9k 1/16W
R9	NRSA63J-242X	M.G.RESISTOR	2.4k 1/16W
R10	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R11	NRSA63J-561X	M.G.RESISTOR	560 1/16W
R13	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R15	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R16	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R17	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R18	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R19	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R20	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R21	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R22	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R23	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R24	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R25	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R26	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R28	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R29	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R30	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R31	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R34	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R35	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R36	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R37	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R38	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R39	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R40	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R41	NRSA63J-100X	M.G.RESISTOR	10 1/16W
RA1	NRZ0015-101X	RESISTOR ARRAY	100
RA2	NRZ0015-101X	RESISTOR ARRAY	100
RA3	NRZ0015-101X	RESISTOR ARRAY	100
C1	NBE41VM-335X	TAN.CAPACITOR	3.3 35V
C2	NBE51EM-106X	TAN.CAPACITOR	10 25V
C3	NBE41CM-106X	TAN.CAPACITOR	10 16V
C4	NBE21AM-106X	TAN.CAPACITOR	10 10V
C5	NBE21AM-106X	TAN.CAPACITOR	10 10V
C6	NBE21AM-106X	TAN.CAPACITOR	10 10V
C7	NBE21CM-105X	TAN.CAPACITOR	1 16V
C8	NBE21AM-106X	TAN.CAPACITOR	10 10V
C9	NBE21AM-106X	TAN.CAPACITOR	10 10V
C10	NBE21AM-106X	TAN.CAPACITOR	10 10V
C21	NCB11EK-105X	CER.CAPACITOR	1 25V
C22	NCB11EK-105X	CER.CAPACITOR	1 25V
C23	NCB11EK-105X	CER.CAPACITOR	1 25V
C24	NCB11EK-105X	CER.CAPACITOR	1 25V
C25	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C26	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C27	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C28	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C29	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C30	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C31	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C32	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C33	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C34	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C35	NCB31CK-104X	CER.CAPACITOR	0.1 16V

6.5 DBCP BOARD ASSEMBLY PARTS LIST 05

CK2699N0B1(U)

CK2699P0B1(E)

05

Symbol No.	Part No.	Part Name	Description
C36	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C37	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C38	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C39	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C41	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C42	NCB31CK-104X	CER.CAPACITOR	0.1 16V
LC1	EXC-CET471U	LC FILTER	
CN1	QGF0508C1-40W	CONNECTOR	40PIN
CN2	QGF0508C1-40W	CONNECTOR	40PIN
CN3	QGF0508C1-40W	CONNECTOR	40PIN
CN4	QGF0508F1-50X	CONNECTOR	50PIN
CN16	QGA1201F2-07X	CONNECTOR	7PIN
K1	NQR0269-004X	FERRITE BEADS	
K2	NQR0269-004X	FERRITE BEADS	
K9	NQR0269-004X	FERRITE BEADS	
TB1	PGZ02228	EARTH LUG	
TB2	PGZ02228	EARTH LUG	
TB3	PGZ02228	EARTH LUG	
TB4	PGZ02228	EARTH LUG	

Symbol No.	Part No.	Part Name	Description
IC201	SIP1250LC	I.C.(M)	NEWCORE
IC202	MT48LC2M32B2-X	I.C.(M)	MICRON
IC203	MM1573DN-X	I.C.(M)	MITSUMI
IC204	MK3754D-X	I.C.(M)	ICS
IC205	SN74AHC1G04K-X	I.C.(M)	TEXAS
IC206	SN74AHC245DGV-X	I.C.(M)	TEXAS
IC207	SN74AHC245DGV-X	I.C.(M)	TEXAS
IC301	XCS30XL-4TQ144C	I.C.(M)	XILINX
IC401	XC95144X10T-008	I.C.(M)	XILINX
IC402	PLSC1442-	I.C.(M)	MBV200BC90PT (U)
	PLSC1443-	I.C.(M)	MBV200BC90PT (E)
IC501	TC7W53FU-X	I.C.(M)	TOSHIBA
IC503	NJM2538V-X	I.C.(M)	JRC
IC504	TC7W08FU-X	I.C.(M)	TOSHIBA
IC505	TC74VHC32FT-X	I.C.(M)	TOSHIBA
IC506	SN74AHC1G04K-X	I.C.(M)	TEXAS
IC507	TA75S01F-X	I.C.(M)	TOSHIBA
IC601	MM1573AN-X	I.C.(M)	MITSUMI
IC602	AK4550VT-X	I.C.(M)	ASAHI KASEI
IC603	AK4363VF-X	I.C.(M)	ASAHI KASEI
IC701	PLSC1441*	I.C.(M)	HD64F2238RFA13
IC702	TC7W34FU-X	I.C.(M)	TOSHIBA
IC703	TC7W34FU-X	I.C.(M)	TOSHIBA
IC704	TA75S01F-X	I.C.(M)	TOSHIBA
IC705	SN74LV138ADGV-X	I.C.(M)	TEXAS
IC708	TC74HC4066AFT-X	I.C.(M)	TOSHIBA
IC801	PLSC1440-	I.C.(M)	HD64F2238RFA13
IC802	SN74LV165ADGV-X	I.C.(M)	TEXAS
IC803	SN74AHC1G32K-X	I.C.(M)	TEXAS
IC804	TC7W34FU-X	I.C.(M)	TOSHIBA
IC805	RN5VD26AA-X	I.C.(M)	RICOH
IC806	UPD6467GR-533-X	I.C.(M)	NEC
IC807	UPD6467GR-533-X	I.C.(M)	NEC
IC808	SN74LV157APW-X	I.C.(M)	TEXAS
IC810	M62366GP-X	I.C.(M)	MITSUBISHI
IC811	M95320-WMN6-X	I.C.(M)	MITSUBISHI
IC812	TC7W126FU-X	I.C.(M)	TOSHIBA
IC813	RS5C314-X	I.C.(M)	RICOH
IC814	MM1573AN-X	I.C.(M)	MITSUMI
IC816	SN74AHC1G04K-X	I.C.(M)	TEXAS
IC817	TC74VHC32FT-X	I.C.(M)	TOSHIBA
Q401	DTA124EUA-X	TRANSISTOR	ROHM
Q501	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q502	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q504	2SK3349DN-W	FET	HITACHI
Q505	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q506	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q507	DTC124EUA-X	TRANSISTOR	ROHM (U)
Q508	DTA124EUA-X	TRANSISTOR	ROHM (U)
Q510	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q511	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q514	DTC124EUA-X	TRANSISTOR	ROHM
Q515	DTA124EUA-X	TRANSISTOR	ROHM
Q516	2SK3349DN-W	FET	HITACHI
Q517	DTC124EUA-X	TRANSISTOR	ROHM
Q518	2SA1790/BC-X	TRANSISTOR	MATSUSHITA
Q521	2SA1790/BC-X	TRANSISTOR	MATSUSHITA
Q522	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q523	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q524	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q530	2SA1790/BC-X	TRANSISTOR	MATSUSHITA
Q531	2SA1790/BC-X	TRANSISTOR	MATSUSHITA
Q532	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q533	2SK3349DN-W	FET	HITACHI
Q534	2SK3349DN-W	FET	HITACHI
Q535	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q536	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q537	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q538	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q701	DTA124EUA-X	TRANSISTOR	ROHM
Q702	DTC124EUA-X	TRANSISTOR	ROHM
Q703	DTA124EUA-X	TRANSISTOR	ROHM

Symbol No.	Part No.	Part Name	Description
Q704	DTC124EUA-X	TRANSISTOR	ROHM
Q802	DTA124EUA-X	TRANSISTOR	ROHM
Q803	DTC124EUA-X	TRANSISTOR	ROHM
Q804	DTA124EUA-X	TRANSISTOR	ROHM
Q805	DTC124EUA-X	TRANSISTOR	ROHM
Q806	DTA124EUA-X	TRANSISTOR	ROHM
Q807	DTC124EUA-X	TRANSISTOR	ROHM
Q808	DTC124EUA-X	TRANSISTOR	ROHM
Q809	DTA124EUA-X	TRANSISTOR	ROHM
Q810	DTC124EUA-X	TRANSISTOR	ROHM
Q811	DTA124EUA-X	TRANSISTOR	ROHM
Q812	DTC124EUA-X	TRANSISTOR	ROHM
Q813	DTC124EUA-X	TRANSISTOR	ROHM
Q815	DTA124EUA-X	TRANSISTOR	ROHM
Q816	2SC4617/RS-X	TRANSISTOR	ROHM
Q817	2SK3349DN-W	FET	HITACHI
D501	HZM5.1NB2-X	ZENER DIODE	HITACHI
D502	MA143A-X	DIODE	MATSUSHITA
D503	HZM5.1NB2-X	ZENER DIODE	HITACHI
D504	HZM6.8NB2-X	ZENER DIODE	HITACHI
D505	HZM6.8NB2-X	ZENER DIODE	HITACHI
D701	HZM3.3NB1-X	ZENER DIODE	HITACHI
D702	HZM3.3NB1-X	ZENER DIODE	HITACHI
D703	HZM5.1NB2-X	ZENER DIODE	HITACHI
D704	HZM5.1NB2-X	ZENER DIODE	HITACHI
D705	HZM3.3NB1-X	ZENER DIODE	HITACHI
D706	HZM12NB2-X	ZENER DIODE	HITACHI
D707	HZM12NB2-X	ZENER DIODE	HITACHI
D708	HZM12NB2-X	ZENER DIODE	HITACHI
D709	HZM18NB2-X	ZENER DIODE	HITACHI
D710	MA741WA-X	DIODE	MATSUSHITA
D801	DAN202U-X	DIODE	ROHM
D802	MA8100/L-X	ZENER DIODE	MATSUSHITA
D803	MA741WK-X	DIODE	MATSUSHITA
D804	MA741WK-X	DIODE	MATSUSHITA
D805	HZM5.1NB2-X	ZENER DIODE	HITACHI
D806	DAN202U-X	DIODE	ROHM
D807	HZM10NB2-X	ZENER DIODE	HITACHI
LD401	SML-210MT/MN-X	L.E.D.	
R103	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R104	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R105	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R106	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R107	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R108	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R109	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R110	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R111	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R112	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R113	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R114	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R115	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R116	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R117	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R118	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R119	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R120	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R121	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R122	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R123	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R124	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R125	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R126	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R127	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R128	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R129	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R132	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R133	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R201	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W

Symbol No.	Part No.	Part Name	Description
R202	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R203	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R204	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R207	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R208	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R209	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R210	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R211	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R212	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R213	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R214	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R215	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R216	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R217	NRSA63J-152X	M.G.RESISTOR	1.5k 1/16W
R218	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R219	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R220	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R221	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R222	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R223	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R224	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R225	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R226	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R227	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R228	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R230	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R231	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R232	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R234	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R235	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R236	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R237	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R239	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R240	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R241	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R243	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R244	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R245	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R246	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R301	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R302	NRSA63J-560X	M.G.RESISTOR	56 1/16W
R303	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R304	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R305	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R306	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R307	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R308	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R309	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R310	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R311	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R312	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R313	NRSA63J-560X	M.G.RESISTOR	56 1/16W
R314	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R315	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R316	NRSA63J-560X	M.G.RESISTOR	56 1/16W
R318	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R319	NRSA63J-560X	M.G.RESISTOR	56 1/16W
R320	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R321	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R322	NRSA63J-560X	M.G.RESISTOR	56 1/16W
R323	NRSA63J-560X	M.G.RESISTOR	56 1/16W
R324	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R325	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R326	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R327	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R328	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R329	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R330	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R335	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R336	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R337	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R340	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W

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Symbol No.	Part No.	Part Name	Description
R401	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R403	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R404	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R405	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R407	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R408	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R409	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R410	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R411	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R412	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R413	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R501	NRSA63J-750X	M.G.RESISTOR	75 1/16W
R502	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R503	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R504	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R505	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R506	NRSA63J-750X	M.G.RESISTOR	75 1/16W
R507	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R508	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R509	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R510	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R512	NRSA63J-151X	M.G.RESISTOR	150 1/16W
R513	NRSA63J-151X	M.G.RESISTOR	150 1/16W
R514	NRSA63J-123X	M.G.RESISTOR	12k 1/16W
R515	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R516	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R517	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R518	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R520	NRSA63J-103X	M.G.RESISTOR	10k 1/16W (U)
R521	NRSA63J-104X	M.G.RESISTOR	100k 1/16W (U)
R523	NRSA63J-333X	M.G.RESISTOR	33k 1/16W
R524	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R525	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R527	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R528	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R529	NRSA63J-331X	M.G.RESISTOR	330 1/16W
R531	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R532	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R533	NRSA63J-182X	M.G.RESISTOR	1.8k 1/16W
R534	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R535	NRSA63J-151X	M.G.RESISTOR	150 1/16W
R536	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R537	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R540	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R541	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R542	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R543	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R545	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R546	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R547	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R548	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R550	NRSA63J-123X	M.G.RESISTOR	12k 1/16W
R551	NRSA63J-563X	M.G.RESISTOR	56k 1/16W (U)
R552	NRSA63J-272X	M.G.RESISTOR	2.7k 1/16W
R554	NRSA63J-151X	M.G.RESISTOR	150 1/16W
R555	NRSA63J-151X	M.G.RESISTOR	150 1/16W
R556	NRSA63J-123X	M.G.RESISTOR	12k 1/16W
R557	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R558	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R559	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R560	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R561	NRSA63J-333X	M.G.RESISTOR	33k 1/16W
R562	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R563	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R565	NRSA63J-224X	M.G.RESISTOR	220k 1/16W
R566	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R567	NRSA63J-391X	M.G.RESISTOR	390 1/16W
R568	NRSA63J-121X	M.G.RESISTOR	120 1/16W
R570	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R571	NRSA63J-183X	M.G.RESISTOR	18k 1/16W
R572	NRSA63J-225X	M.G.RESISTOR	2.2M 1/16W
R573	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R575	NRSA63J-391X	M.G.RESISTOR	390 1/16W

Symbol No.	Part No.	Part Name	Description
R576	NRSA63J-121X	M.G.RESISTOR	120 1/16W
R579	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R582	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R585	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R588	NRSA63J-821X	M.G.RESISTOR	820 1/16W
R589	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R591	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R592	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R593	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R594	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R595	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R596	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R597	NRSA63J-182X	M.G.RESISTOR	1.8k 1/16W
R598	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R599	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R601	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R602	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R603	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R604	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R605	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R606	NRSA63J-512X	M.G.RESISTOR	5.1k 1/16W
R607	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R608	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R701	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R702	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R709	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R710	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R711	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R712	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R713	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R714	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R715	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R716	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R717	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R718	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R719	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R720	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R721	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R722	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R723	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R724	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R725	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R726	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R727	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R728	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R729	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R730	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R731	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R733	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R734	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R735	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R736	NRSA63J-223X	M.G.RESISTOR	22k 1/16W (E)
R737	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W (U)
R738	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R739	NRSA63J-124X	M.G.RESISTOR	120k 1/16W
R740	NRSA63J-124X	M.G.RESISTOR	120k 1/16W
R741	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R744	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R745	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R752	NRSA63J-622X	M.G.RESISTOR	6.2k 1/16W
R753	NRSA63J-622X	M.G.RESISTOR	6.2k 1/16W
R754	NRSA63J-392X	M.G.RESISTOR	3.9k 1/16W
R755	NRSA63J-392X	M.G.RESISTOR	3.9k 1/16W
R757	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R758	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R759	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R760	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R761	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R762	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R763	NRSA63J-392X	M.G.RESISTOR	3.9k 1/16W
R764	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R765	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R766	NRSA63J-102X	M.G.RESISTOR	1k 1/16W

Symbol No.	Part No.	Part Name	Description
R801	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R802	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R803	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R804	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R805	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R806	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R807	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R808	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R809	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R810	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R811	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R812	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R813	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R814	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R815	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R816	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R817	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R818	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R819	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R820	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R821	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R822	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R823	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R824	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R825	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R826	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R827	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R828	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R829	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R830	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R831	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R832	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R833	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R834	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R835	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R836	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R837	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R838	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R839	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R841	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R843	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R845	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R846	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R847	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R848	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R849	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R850	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R851	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R852	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R854	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R855	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R856	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R857	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R858	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R859	NRSA63J-474X	M.G.RESISTOR	470k 1/16W
R860	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R861	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R862	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R863	NRSA63J-221X	M.G.RESISTOR	220 1/16W
R864	NRSA63J-221X	M.G.RESISTOR	220 1/16W
R865	NRSA63J-221X	M.G.RESISTOR	220 1/16W
R866	NRSA63J-221X	M.G.RESISTOR	220 1/16W
R875	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R876	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R877	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R878	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R879	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R880	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R881	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R882	NRSA63J-271X	M.G.RESISTOR	270 1/16W
R883	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R884	NRSA63J-622X	M.G.RESISTOR	6.2k 1/16W

Symbol No.	Part No.	Part Name	Description
R885	NRSA63J-561X	M.G.RESISTOR	560 1/16W
R886	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R887	NRSA63J-752X	M.G.RESISTOR	7.5k 1/16W
R888	NRSA63J-123X	M.G.RESISTOR	12k 1/16W
R889	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R890	NRSA63J-331X	M.G.RESISTOR	330 1/16W
R891	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R892	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R897	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R900	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R903	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R904	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R905	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R906	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R907	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R908	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R910	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R911	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R912	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R913	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R914	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R915	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R916	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R923	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R924	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R925	NRSA63J-104X	M.G.RESISTOR	100k 1/16W (U)
	NRSA63J-105X	M.G.RESISTOR	1M 1/16W (E)
R926	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R930	NRSA63J-333X	M.G.RESISTOR	33k 1/16W
R931	NRSA63J-683X	M.G.RESISTOR	68k 1/16W
R932	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R933	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R934	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R936	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R937	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R980	NRSA63J-270X	M.G.RESISTOR	27 1/16W
R981	NRSA63J-270X	M.G.RESISTOR	27 1/16W
R982	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
R985	NRSA63J-270X	M.G.RESISTOR	27 1/16W
R986	NRSA63J-270X	M.G.RESISTOR	27 1/16W
R987	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
R988	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W (U)
R992	NRSA63J-392X	M.G.RESISTOR	3.9k 1/16W
RA301	NRZ0015-101X	RESISTOR ARRAY	100
RA302	NRZ0015-101X	RESISTOR ARRAY	100
RA303	NRZ0015-101X	RESISTOR ARRAY	100
RA304	NRZ0015-101X	RESISTOR ARRAY	100
RA305	NRZ0015-101X	RESISTOR ARRAY	100
RA306	NRZ0015-101X	RESISTOR ARRAY	100
RA307	NRZ0015-101X	RESISTOR ARRAY	100
C101	NBE21AM-106X	TAN.CAPACITOR	10 10V
C102	NBE21AM-106X	TAN.CAPACITOR	10 10V
C103	NCB11AK-106X	CER.CAPACITOR	10 10V
C104	NCB11AK-106X	CER.CAPACITOR	10 10V
C105	NCB11AK-106X	CER.CAPACITOR	10 10V
C106	NCB11AK-106X	CER.CAPACITOR	10 10V
C107	NCB11AK-106X	CER.CAPACITOR	10 10V
C108	NCB11AK-106X	CER.CAPACITOR	10 10V
C109	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C201	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C202	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C203	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C204	NBE21AM-106X	TAN.CAPACITOR	10 10V
C205	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C206	NDC31HJ-120X	CER.CAPACITOR	12p 50V
C207	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C208	NDC31HJ-120X	CER.CAPACITOR	12p 50V
C209	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C210	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C211	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C212	NCB31CK-104X	CER.CAPACITOR	0.1 16V

05[DBCP]

Symbol No.	Part No.	Part Name	Description
C213	NCB11AK-106X	CER.CAPACITOR	10 10V
C214	NCB11AK-106X	CER.CAPACITOR	10 10V
C215	NBE21AM-106X	TAN.CAPACITOR	10 10V
C216	NBE21AM-106X	TAN.CAPACITOR	10 10V
C217	NBE21AM-106X	TAN.CAPACITOR	10 10V
C218	NBE21AM-106X	TAN.CAPACITOR	10 10V
C219	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C220	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C221	NCB11AK-106X	CER.CAPACITOR	10 10V
C222	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C223	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C224	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C225	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C226	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C227	NBE21AM-106X	TAN.CAPACITOR	10 10V
C228	NBE21AM-106X	TAN.CAPACITOR	10 10V
C229	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C230	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C231	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C232	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C233	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C234	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C235	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C236	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C237	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C238	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C239	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C240	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C241	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C242	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C243	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C244	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C245	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C246	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C247	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C248	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C249	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C250	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C251	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C252	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C253	NBE21AM-106X	TAN.CAPACITOR	10 10V
C254	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C255	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C256	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C257	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C258	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C259	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C260	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C261	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C262	NBE21AM-106X	TAN.CAPACITOR	10 10V
C263	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C264	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C265	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C266	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C301	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C302	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C303	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C304	NBE21AM-106X	TAN.CAPACITOR	10 10V
C305	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C306	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C307	NBE21AM-106X	TAN.CAPACITOR	10 10V
C308	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C401	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C402	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C403	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C404	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C405	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C406	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C407	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C408	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C501	NDC31HJ-220X	CER.CAPACITOR	22p 50V
C502	NDC31HJ-470X	CER.CAPACITOR	47p 50V
C503	NDC31HJ-220X	CER.CAPACITOR	22p 50V

Symbol No.	Part No.	Part Name	Description
C504	NDC31HJ-470X	CER.CAPACITOR	47p 50V
C509	NDC31HJ-150X	CER.CAPACITOR	15p 50V
C527	NDC31HJ-150X	CER.CAPACITOR	15p 50V
C528	NBE41CM-156X	TAN.CAPACITOR	15 16V
C529	NBE41CM-156X	TAN.CAPACITOR	15 16V
C530	NCB11AK-106X	CER.CAPACITOR	10 10V
C531	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C532	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C533	NRSA63J-0R0X	M.G.RESISTOR	0p
C534	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C535	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C536	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C537	NCB11AK-106X	CER.CAPACITOR	10 10V
C538	NBE60JM-337X	TAN.CAPACITOR	330 6.3V
C539	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C541	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C542	NCB11AK-106X	CER.CAPACITOR	10 10V
C543	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C544	NCB11AK-106X	CER.CAPACITOR	10 10V
C545	NBE60JM-337X	TAN.CAPACITOR	330 6.3V
C546	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C550	NCB31CK-104X	CER.CAPACITOR	0.1 16V (U)
C551	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C552	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C553	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C554	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C555	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C556	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C557	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C558	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C560	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C601	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C602	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C603	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C604	NBE21AM-106X	TAN.CAPACITOR	10 10V
C605	NBE21AM-106X	TAN.CAPACITOR	10 10V
C606	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C607	NBE21AM-106X	TAN.CAPACITOR	10 10V
C608	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C609	NBE21AM-106X	TAN.CAPACITOR	10 10V
C610	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C611	NCB31AK-224X	CER.CAPACITOR	0.22 10V
C612	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C613	NBE21AM-106X	TAN.CAPACITOR	10 10V
C614	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C615	NBE21AM-106X	TAN.CAPACITOR	10 10V
C616	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C617	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C701	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C702	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C703	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C704	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C705	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C706	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C707	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C708	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C709	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C710	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C713	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C714	NBE51VM-475X	TAN.CAPACITOR	4.7 35V
C715	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C716	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C717	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C718	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C719	NBE21AM-106X	TAN.CAPACITOR	10 10V
C720	NBE21AM-106X	TAN.CAPACITOR	10 10V
C722	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C723	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C801	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C802	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C803	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C804	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C805	NCB31CK-104X	CER.CAPACITOR	0.1 16V

Symbol No.	Part No.	Part Name	Description
C808	NDC31HJ-220X	CER.CAPACITOR	22p 50V
C809	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C810	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C811	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C812	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C814	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C815	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C818	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C819	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C820	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C821	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C822	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C823	NDC31HJ-120X	CER.CAPACITOR	12p 50V
C824	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C825	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C826	NBE21AM-106X	TAN.CAPACITOR	10 10V
C827	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C828	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C829	NBE21AM-106X	TAN.CAPACITOR	10 10V
C830	NBE21AM-106X	TAN.CAPACITOR	10 10V
C831	NBE21VM-105X	TAN.CAPACITOR	1 35V
C832	NCB11CK-105X	CER.CAPACITOR	1 16V
C833	NCB31CK-104X	CER.CAPACITOR	0.1 16V
L504	NQL024J-220X	COIL	22uH
L508	NQL024J-220X	COIL	22uH
LC101	EXC-CET471U	LC FILTER	
LC102	EXC-CET471U	LC FILTER	
LC103	EXC-CET471U	LC FILTER	
LC104	EXC-CET471U	LC FILTER	
LC201	EXC-CET471U	LC FILTER	
LC202	EXC-CET471U	LC FILTER	
LC203	EXC-CET471U	LC FILTER	
LC301	EXC-CET471U	LC FILTER	
LC601	EXC-CET471U	LC FILTER	
LC602	EXC-CET471U	LC FILTER	
LC701	EXC-CET471U	LC FILTER	
LC801	EXC-CET471U	LC FILTER	
X201	NAX0394-001X	CRYSTAL	13.5MHz
X701	NAX0536-001X	CRYSTAL	13.5MHz
X801	NAX0536-001X	CRYSTAL	13.5MHz
X802	NAX0325-001X	CRYSTAL	32.768kHz
S401	NSW0005-001X	TACT SWITCH	
S402	NSW0022-001X	DIP SWITCH	
CN4	QGF0508F2-50X	CONNECTOR	50PIN
CN5	QGA1201F2-06X	CONNECTOR	6PIN
CN6	QGF1012F1-10X	CONNECTOR	10PIN
CN8	QGA1201F2-09X	CONNECTOR	9PIN
CN9	QGA1201F2-12X	CONNECTOR	12PIN
CN14	QGF0508F1-30X	CONNECTOR	30PIN
CN26	QGF0508F1-20X	CONNECTOR	20PIN
CN27	QGF0508F1-33X	CONNECTOR	33PIN
CN33	QGF1012F1-10X	CONNECTOR	10PIN
CN34	QGF1012F1-06X	CONNECTOR	6PIN
CN35	QGA1201F2-10X	CONNECTOR	10PIN
CN102	QGF0508F2-30X	CONNECTOR	30PIN
CN103	QGF0508F2-45X	CONNECTOR	45PIN
CN401	QGB0811L1-10X	CONNECTOR	10PIN
CN801	QGB0502L1-40X	CONNECTOR	40PIN
TP101	NNZ0009-001X	TEST POINT	, x28
BT801	QAB0020-001	LI BATTERY	

Symbol No.	Part No.	Part Name	Description
K201	NQR0269-004X	FERRITE BEADS	
K203	NQR0269-004X	FERRITE BEADS	
K204	NQR0269-004X	FERRITE BEADS	
K205	NQR0269-004X	FERRITE BEADS	
K206	NQR0269-004X	FERRITE BEADS	
K207	NQR0269-004X	FERRITE BEADS	
K401	NQR0269-004X	FERRITE BEADS	
K402	NQR0269-004X	FERRITE BEADS	
K501	NQR0269-004X	FERRITE BEADS	
K502	NQR0269-004X	FERRITE BEADS	
K503	NQR0269-004X	FERRITE BEADS	
K701	NQR0269-004X	FERRITE BEADS	
K702	NQR0269-004X	FERRITE BEADS	
K703	NQR0269-004X	FERRITE BEADS	
K801	NQR0269-004X	FERRITE BEADS	
K802	NQR0269-004X	FERRITE BEADS	
K803	NQR0269-004X	FERRITE BEADS	
K804	NQR0269-004X	FERRITE BEADS	
TB1	PGZ02228	EARTH LUG	
TB2	PGZ02228	EARTH LUG	

6.6 ALS BOARD ASSEMBLY PARTS LIST 06

CK270000B1

06

Symbol No.	Part No.	Part Name	Description
IC1	TC4053BF-W	I.C.(M)	TOSHIBA
IC2	NJM2068M-D-XE	I.C.(M)	JRC
IC3	NJM2068M-D-XE	I.C.(M)	JRC
IC4	TC4053BF-W	I.C.(M)	TOSHIBA
IC5	NJM2068M-D-XE	I.C.(M)	JRC
IC6	TC4W53F-X	I.C.(M)	TOSHIBA
IC7	TC4W53F-X	I.C.(M)	TOSHIBA
IC8	TC4W53F-X	I.C.(M)	TOSHIBA
IC9	TC4W53F-X	I.C.(M)	TOSHIBA
IC10	TC4S66F-X	I.C.(M)	TOSHIBA
IC11	TC4W53F-X	I.C.(M)	TOSHIBA
IC12	NJM2904M-XE	I.C.(M)	JRC
IC15	NJM2068M-D-XE	I.C.(M)	JRC
IC16	BA3314F-X	I.C.(M)	ROHM
IC17	BA3314F-X	I.C.(M)	ROHM
IC18	TC4051BF-X	I.C.(M)	TOSHIBA
IC19	TC4051BF-X	I.C.(M)	TOSHIBA
IC20	TC4S66F-X	I.C.(M)	TOSHIBA
IC21	TC4S66F-X	I.C.(M)	TOSHIBA
IC22	NJM2068M-D-XE	I.C.(M)	JRC
IC23	NJM2068M-D-XE	I.C.(M)	JRC
IC24	NJM2068M-D-XE	I.C.(M)	JRC
IC301	CXA3582R	I.C.(M)	SONY
IC501	TC4051BF-X	I.C.(M)	TOSHIBA
IC502	TC4S66F-X	I.C.(M)	TOSHIBA
IC503	TC4S66F-X	I.C.(M)	TOSHIBA
IC504	TC4S66F-X	I.C.(M)	TOSHIBA
IC505	TC4S66F-X	I.C.(M)	TOSHIBA
IC506	TC4W53F-X	I.C.(M)	TOSHIBA
IC507	NJM2068M-D-XE	I.C.(M)	JRC
IC508	TC4W53F-X	I.C.(M)	TOSHIBA
IC509	NJM2068M-D-XE	I.C.(M)	JRC
IC510	NJM2068M-D-XE	I.C.(M)	JRC
IC511	NJM2068M-D-XE	I.C.(M)	JRC
IC512	NJM2068M-D-XE	I.C.(M)	JRC
IC513	M51132FP-X	I.C.(M)	MITSUBISHI
IC514	TC4W53F-X	I.C.(M)	TOSHIBA
IC515	TC4W53F-X	I.C.(M)	TOSHIBA
IC516	M5216FP-X	I.C.(M)	MITSUBISHI
IC517	M5218AFP-X	I.C.(M)	MITSUBISHI
IC518	BA6138F-X	I.C.(M)	ROHM
IC701	SN74AHC1G14K-X	I.C.(M)	TEXAS
IC702	SN74AHC1G14K-X	I.C.(M)	TEXAS
IC703	SN74AHC2G74U-X	I.C.(M)	TEXAS
IC704	SN74LV165ADGV-X	I.C.(M)	TEXAS
IC705	SN74LV165ADGV-X	I.C.(M)	TEXAS
IC706	SN74LV165ADGV-X	I.C.(M)	TEXAS
IC707	BU4094BCFV-X	I.C.(M)	ROHM
IC708	BU4094BCFV-X	I.C.(M)	ROHM
IC709	BU4094BCFV-X	I.C.(M)	ROHM
IC710	SN74LV165ADGV-X	I.C.(M)	TEXAS
Q2	2SB1463/RST-X	TRANSISTOR	MATSUSHITA
Q3	2SD2240/RS-X	TRANSISTOR	MATSUSHITA
Q4	DTA124EUA-X	TRANSISTOR	ROHM
Q5	DTC124EUA-X	TRANSISTOR	ROHM
Q9	DTC124EUA-X	TRANSISTOR	ROHM
Q12	2SK1062-X	FET	TOSHIBA
Q14	2SB1463/RST-X	TRANSISTOR	MATSUSHITA
Q15	2SD2240/RS-X	TRANSISTOR	MATSUSHITA
Q16	DTA124EUA-X	TRANSISTOR	ROHM
Q17	DTC124EUA-X	TRANSISTOR	ROHM
Q23	DTC124EUA-X	TRANSISTOR	ROHM
Q24	2SK1062-X	FET	TOSHIBA
Q25	DTC144EUA-X	TRANSISTOR	ROHM
Q26	DTC144EUA-X	TRANSISTOR	ROHM
Q27	DTC144EUA-X	TRANSISTOR	ROHM
Q28	2SD601A/QRS-X	TRANSISTOR	MATSUSHITA
Q29	2SD601A/QRS-X	TRANSISTOR	MATSUSHITA
Q32	DTA124EUA-X	TRANSISTOR	ROHM
Q33	DTC144EUA-X	TRANSISTOR	ROHM
Q34	DTC144EUA-X	TRANSISTOR	ROHM

Symbol No.	Part No.	Part Name	Description
Q35	DTC144EUA-X	TRANSISTOR	ROHM
Q38	DTC144EUA-X	TRANSISTOR	ROHM
Q39	DTC144EUA-X	TRANSISTOR	ROHM
Q40	2SD2240/RS-X	TRANSISTOR	MATSUSHITA
Q41	DTC144EUA-X	TRANSISTOR	ROHM
Q42	DTC144EUA-X	TRANSISTOR	ROHM
Q303	2SA1790/BC-X	TRANSISTOR	MATSUSHITA
Q304	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q305	2SC4626/BC-X	TRANSISTOR	MATSUSHITA
Q313	DTC144EUA-X	TRANSISTOR	ROHM
Q316	2SA1790/BC-X	TRANSISTOR	MATSUSHITA
Q323	2SA1790/BC-X	TRANSISTOR	MATSUSHITA
Q501	DTC144EUA-X	TRANSISTOR	ROHM
Q502	DTC144EUA-X	TRANSISTOR	ROHM
Q503	DTA124EUA-X	TRANSISTOR	ROHM
Q504	DTC144EUA-X	TRANSISTOR	ROHM
Q505	DTC144EUA-X	TRANSISTOR	ROHM
Q507	DTC144EUA-X	TRANSISTOR	ROHM
Q508	2SD601A/QRS-X	TRANSISTOR	MATSUSHITA
Q509	2SD601A/QRS-X	TRANSISTOR	MATSUSHITA
Q510	FMW3-X	TRANSISTOR	ROHM
Q511	DTA114EUA-X	TRANSISTOR	ROHM
Q512	DTC144EUA-X	TRANSISTOR	ROHM
Q513	DTA114EUA-X	TRANSISTOR	ROHM
Q515	2SA1790/BC-X	TRANSISTOR	MATSUSHITA
Q516	2SJ279S-X	FET	HITACHI
Q517	DTC124EUA-X	TRANSISTOR	ROHM
Q518	2SD601A/QRS-X	TRANSISTOR	MATSUSHITA
Q519	2SD601A/QRS-X	TRANSISTOR	MATSUSHITA
Q701	DTC124EUA-X	TRANSISTOR	ROHM
Q702	DTC124EUA-X	TRANSISTOR	ROHM
Q703	DTC124EUA-X	TRANSISTOR	ROHM
Q704	DTC124EUA-X	TRANSISTOR	ROHM
Q705	DTC124EUA-X	TRANSISTOR	ROHM
D1	MA143A-X	DIODE	MATSUSHITA
D2	MA143A-X	DIODE	MATSUSHITA
D3	MA143A-X	DIODE	MATSUSHITA
D4	MA143A-X	DIODE	MATSUSHITA
D5	MA143A-X	DIODE	MATSUSHITA
D6	MA143A-X	DIODE	MATSUSHITA
D7	MA143A-X	DIODE	MATSUSHITA
D8	MA143A-X	DIODE	MATSUSHITA
D303	HZM3.0NB1-X	ZENER DIODE	HITACHI
D304	HZM3.9NB2-X	ZENER DIODE	HITACHI
D501	MA143A-X	DIODE	MATSUSHITA
D502	MA142WK-X	DIODE	MATSUSHITA
D505	MA143A-X	DIODE	MATSUSHITA
D506	MA143A-X	DIODE	MATSUSHITA
D507	MA143A-X	DIODE	MATSUSHITA
LD701	SML-020MVT-W	L.E.D.	
LD702	SML-020MVT-W	L.E.D.	
LD703	SML-020MVT-W	L.E.D.	
PC1	P873-25	I.C.(PH COUPLER)	
R1	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R2	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R3	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R4	NRSA63J-122X	M.G.RESISTOR	1.2k 1/16W
R5	NRSA63J-122X	M.G.RESISTOR	1.2k 1/16W
R6	NRSA63J-122X	M.G.RESISTOR	1.2k 1/16W
R7	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R8	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R9	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R10	NRSA63J-122X	M.G.RESISTOR	1.2k 1/16W
R11	NRSA63J-122X	M.G.RESISTOR	1.2k 1/16W
R12	NRSA63J-122X	M.G.RESISTOR	1.2k 1/16W
R14	NRSA63J-274X	M.G.RESISTOR	270k 1/16W
R15	NRSA63J-274X	M.G.RESISTOR	270k 1/16W

Symbol No.	Part No.	Part Name	Description
R16	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R17	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R18	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R20	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R21	NRSA63J-243X	M.G.RESISTOR	24k 1/16W
R22	NRSA63J-361X	M.G.RESISTOR	360 1/16W
R23	NRSA63J-361X	M.G.RESISTOR	360 1/16W
R24	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R25	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R26	NRSA63J-243X	M.G.RESISTOR	24k 1/16W
R27	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R28	NRSA63J-750X	M.G.RESISTOR	75 1/16W
R29	NRSA63J-622X	M.G.RESISTOR	6.2k 1/16W
R33	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R34	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R35	NRSA63J-620X	M.G.RESISTOR	62 1/16W
R36	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R37	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R38	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R39	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R40	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R41	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R42	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R43	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R44	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R46	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R47	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R48	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R49	NRSA63J-122X	M.G.RESISTOR	1.2k 1/16W
R50	NRSA63J-122X	M.G.RESISTOR	1.2k 1/16W
R51	NRSA63J-122X	M.G.RESISTOR	1.2k 1/16W
R52	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R53	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R54	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R55	NRSA63J-122X	M.G.RESISTOR	1.2k 1/16W
R56	NRSA63J-122X	M.G.RESISTOR	1.2k 1/16W
R57	NRSA63J-122X	M.G.RESISTOR	1.2k 1/16W
R59	NRSA63J-274X	M.G.RESISTOR	270k 1/16W
R60	NRSA63J-274X	M.G.RESISTOR	270k 1/16W
R61	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R62	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R63	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R64	NRSA63J-243X	M.G.RESISTOR	24k 1/16W
R65	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R66	NRSA63J-361X	M.G.RESISTOR	360 1/16W
R67	NRSA63J-361X	M.G.RESISTOR	360 1/16W
R68	NRSA63J-243X	M.G.RESISTOR	24k 1/16W
R69	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R70	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R71	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R72	NRSA63J-750X	M.G.RESISTOR	75 1/16W
R73	NRSA63J-622X	M.G.RESISTOR	6.2k 1/16W
R77	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R78	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R79	NRSA63J-620X	M.G.RESISTOR	62 1/16W
R80	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R81	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R82	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R83	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R84	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R85	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R86	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R87	NRSA63J-224X	M.G.RESISTOR	220k 1/16W
R88	NRSA63J-224X	M.G.RESISTOR	220k 1/16W
R89	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R91	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R92	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R94	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R95	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R96	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R97	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R98	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R101	NRSA63J-104X	M.G.RESISTOR	100k 1/16W

Symbol No.	Part No.	Part Name	Description
R102	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R103	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R104	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R105	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R106	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R109	NRSA63J-113X	M.G.RESISTOR	11k 1/16W
R111	NRSA63J-682X	M.G.RESISTOR	6.8k 1/16W
R112	NRSA63J-272X	M.G.RESISTOR	2.7k 1/16W
R113	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R114	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R116	NRSA63J-682X	M.G.RESISTOR	6.8k 1/16W
R117	NRSA63J-272X	M.G.RESISTOR	2.7k 1/16W
R118	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R119	NRSA63J-113X	M.G.RESISTOR	11k 1/16W
R121	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R124	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R125	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R126	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R127	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R128	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R129	NRSA63J-392X	M.G.RESISTOR	3.9k 1/16W
R130	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R131	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R132	NRSA63J-392X	M.G.RESISTOR	3.9k 1/16W
R133	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
R135	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R136	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R138	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
R139	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R142	NRSA63J-224X	M.G.RESISTOR	220k 1/16W
R144	NRSA63J-224X	M.G.RESISTOR	220k 1/16W
R147	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R149	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R150	NRSA63J-683X	M.G.RESISTOR	68k 1/16W
R151	NRSA63J-242X	M.G.RESISTOR	2.4k 1/16W
R152	NRSA63J-681X	M.G.RESISTOR	680 1/16W
R153	NRSA63J-242X	M.G.RESISTOR	2.4k 1/16W
R154	NRSA63J-681X	M.G.RESISTOR	680 1/16W
R155	NRSA63J-683X	M.G.RESISTOR	68k 1/16W
R156	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R157	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R158	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R159	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R160	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R161	NRSA63J-152X	M.G.RESISTOR	1.5k 1/16W
R162	NRSA63J-911X	M.G.RESISTOR	910 1/16W
R163	NRSA63J-183X	M.G.RESISTOR	18k 1/16W
R164	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R165	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R166	NRSA63J-152X	M.G.RESISTOR	1.5k 1/16W
R167	NRSA63J-911X	M.G.RESISTOR	910 1/16W
R168	NRSA63J-183X	M.G.RESISTOR	18k 1/16W
R169	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R170	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R171	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R172	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R173	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R174	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R175	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R176	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R177	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R178	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R179	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R180	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R181	NRSA63J-681X	M.G.RESISTOR	680 1/16W
R184	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R185	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R186	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R187	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R188	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R189	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R195	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R196	NRSA63J-473X	M.G.RESISTOR	47k 1/16W

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Symbol No.	Part No.	Part Name	Description
R319	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R320	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R321	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R322	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R323	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R325	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R328	NRSA63J-333X	M.G.RESISTOR	33k 1/16W
R334	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R335	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R336	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R337	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R338	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R339	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R350	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R362	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R363	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R364	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R370	NRSA63J-331X	M.G.RESISTOR	330 1/16W
R371	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R372	NRSA63J-271X	M.G.RESISTOR	270 1/16W
R373	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R374	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R375	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R380	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R381	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R382	NRSA63J-331X	M.G.RESISTOR	330 1/16W
R383	NRSA63J-681X	M.G.RESISTOR	680 1/16W
R384	NRSA63J-681X	M.G.RESISTOR	680 1/16W
R385	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R386	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R387	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R390	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R501	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R502	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R503	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R504	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R505	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R506	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R507	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R508	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R509	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R510	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R511	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R512	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R513	NRSA63J-123X	M.G.RESISTOR	12k 1/16W
R514	NRSA63J-183X	M.G.RESISTOR	18k 1/16W
R515	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R517	NRSA63J-183X	M.G.RESISTOR	18k 1/16W
R519	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R520	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R521	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R522	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R523	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R524	NRSA63J-123X	M.G.RESISTOR	12k 1/16W
R525	NRSA63J-183X	M.G.RESISTOR	18k 1/16W
R526	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R527	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R529	NRSA63J-183X	M.G.RESISTOR	18k 1/16W
R530	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R531	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R532	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R535	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R536	NRSA63J-202X	M.G.RESISTOR	2k 1/16W
R537	NRSA63J-202X	M.G.RESISTOR	2k 1/16W
R538	NRSA63J-202X	M.G.RESISTOR	2k 1/16W
R539	NRSA63J-202X	M.G.RESISTOR	2k 1/16W
R540	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R541	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R542	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R543	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R544	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R545	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R546	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W

Symbol No.	Part No.	Part Name	Description
R549	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R550	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R551	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R554	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R557	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R559	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R561	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R566	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R567	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R568	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R569	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R570	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R571	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R572	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R573	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R574	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R575	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R576	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R578	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R580	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R581	NRSA63J-470X	M.G.RESISTOR	47 1/16W
R582	NRSA63J-823X	M.G.RESISTOR	82k 1/16W
R583	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R584	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R585	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R586	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R587	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R588	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R589	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R596	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R597	NRSA63J-823X	M.G.RESISTOR	82k 1/16W
R598	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R599	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R600	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R601	NRSA63J-470X	M.G.RESISTOR	47 1/16W
R602	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R603	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R604	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R605	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R606	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R607	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R608	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R609	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R610	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R611	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R613	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R614	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R615	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R616	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R617	NRSA63J-822X	M.G.RESISTOR	8.2k 1/16W
R618	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R619	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R621	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R623	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R624	NRSA63J-822X	M.G.RESISTOR	8.2k 1/16W
R625	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R626	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R631	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R632	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R633	NRSA63J-152X	M.G.RESISTOR	1.5k 1/16W
R634	NRSA63J-152X	M.G.RESISTOR	1.5k 1/16W
R635	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R636	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R637	NRSA63J-154X	M.G.RESISTOR	150k 1/16W
R638	NRSA63J-154X	M.G.RESISTOR	150k 1/16W
R639	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R640	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R641	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R642	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R643	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R646	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R647	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R648	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W

Symbol No.	Part No.	Part Name	Description
R650	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R651	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R652	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R653	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R654	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R655	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R656	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R657	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R658	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R661	NRSA63J-122X	M.G.RESISTOR	1.2k 1/16W
R662	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R663	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R664	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R665	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R701	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R702	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R703	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R704	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R705	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R706	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R707	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R708	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R709	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R710	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R711	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R712	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R713	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R714	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R715	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R716	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R717	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R718	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R719	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R720	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R721	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R722	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R723	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R724	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R725	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R726	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R727	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R728	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R729	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R730	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R731	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R732	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R733	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R734	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R735	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R736	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R737	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R738	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R739	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R740	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R741	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R742	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R743	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R744	NRSA63J-181X	M.G.RESISTOR	180 1/16W
VR1	QVQ0290-A14	VAL.RESISTOR	A10k, REC VR(L)
VR2	QVQ0290-A14	VAL.RESISTOR	A10k, REC VR(R)
VR501	NVP1415-104X	TRIM.RESISTOR	100k, L EE LEVE
VR502	NVP1415-104X	TRIM.RESISTOR	100k, L UNI LEV
VR503	NVP1415-104X	TRIM.RESISTOR	100k, R EE LEVE
VR504	NVP1415-104X	TRIM.RESISTOR	100k, R UNI LEV
VR505	QVQ0290-B14	VAL.RESISTOR	10k, MONITOR
VR506	NVP1415-502X	TRIM.RESISTOR	5k, LCH LEVEL
VR507	NVP1415-502X	TRIM.RESISTOR	5k, RCH LEVEL
C1	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C2	NFV72CK-474X	FILM CAPACITOR	0.47 160V
C3	NFV72CK-474X	FILM CAPACITOR	0.47 160V

Symbol No.	Part No.	Part Name	Description
C6	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C7	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C8	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C11	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C12	NEH91CM-106X	E.CAPACITOR	10 16V
C13	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C14	NEH91CM-106X	E.CAPACITOR	10 16V
C15	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C16	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C17	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C18	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C19	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C20	NEH91CM-106X	E.CAPACITOR	10 16V
C21	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C22	NEH91CM-106X	E.CAPACITOR	10 16V
C23	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C24	NFV72CK-474X	FILM CAPACITOR	0.47 160V
C25	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C26	NFV72CK-474X	FILM CAPACITOR	0.47 160V
C29	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C30	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C31	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C34	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C35	NEH91CM-106X	E.CAPACITOR	10 16V
C36	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C37	NEH91CM-106X	E.CAPACITOR	10 16V
C38	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C45	NCB41CM-106X	CER.CAPACITOR	10 16V
C46	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C47	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C48	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C49	NCB31AK-224X	CER.CAPACITOR	0.22 10V
C50	NEH91CM-476X	E.CAPACITOR	47 16V
C51	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C52	NCB31AK-224X	CER.CAPACITOR	0.22 10V
C53	NEH91CM-476X	E.CAPACITOR	47 16V
C54	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C55	NCB41CM-106X	CER.CAPACITOR	10 16V
C56	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C57	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C58	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C59	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C60	NCB41CM-106X	CER.CAPACITOR	10 16V
C61	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C62	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C63	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C64	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C65	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C66	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C67	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C68	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C73	NCB41CM-106X	CER.CAPACITOR	10 16V
C74	NCB41CM-106X	CER.CAPACITOR	10 16V
C76	NCB41CM-106X	CER.CAPACITOR	10 16V
C77	NEH91CM-106X	E.CAPACITOR	10 16V
C78	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C79	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C80	NEH91CM-106X	E.CAPACITOR	10 16V
C81	NCB41CM-106X	CER.CAPACITOR	10 16V
C82	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C83	NEH91CM-106X	E.CAPACITOR	10 16V
C84	NEH91CM-106X	E.CAPACITOR	10 16V
C85	NEH91CM-106X	E.CAPACITOR	10 16V
C86	NEH91CM-106X	E.CAPACITOR	10 16V
C87	NEH91CM-106X	E.CAPACITOR	10 16V
C88	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C89	NEH91CM-106X	E.CAPACITOR	10 16V
C90	NCB41CM-106X	CER.CAPACITOR	10 16V
C91	NEH91CM-106X	E.CAPACITOR	10 16V
C101	NCB41CM-106X	CER.CAPACITOR	10 16V
C102	NEH91CM-106X	E.CAPACITOR	10 16V
C104	NCB41CM-106X	CER.CAPACITOR	10 16V
C105	NCB41CM-106X	CER.CAPACITOR	10 16V

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Symbol No.	Part No.	Part Name	Description
C106	NCB41CM-106X	CER.CAPACITOR	10 16V
C107	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C108	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C109	NDC31HJ-100X	CER.CAPACITOR	10p 50V
C110	NCB41CM-106X	CER.CAPACITOR	10 16V
C112	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C113	NEH91CM-106X	E.CAPACITOR	10 16V
C114	NCB41CM-106X	CER.CAPACITOR	10 16V
C115	NDC31HJ-100X	CER.CAPACITOR	10p 50V
C116	NEH91CM-106X	E.CAPACITOR	10 16V
C117	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C118	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C119	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C120	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C121	NCB31EK-223X	CER.CAPACITOR	0.022 25V
C122	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C123	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C124	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C125	NCB41CM-106X	CER.CAPACITOR	10 16V
C126	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C127	NCB41CM-106X	CER.CAPACITOR	10 16V
C128	NCB31EK-223X	CER.CAPACITOR	0.022 25V
C129	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C130	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C132	NCB31EK-223X	CER.CAPACITOR	0.022 25V
C133	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C134	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
C135	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C136	NEH91CM-106X	E.CAPACITOR	10 16V
C137	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C138	NEH91CM-106X	E.CAPACITOR	10 16V
C139	NCB41CM-106X	CER.CAPACITOR	10 16V
C140	NEH91HM-105X	E.CAPACITOR	1 50V
C141	NEH91HM-105X	E.CAPACITOR	1 50V
C147	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C315	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C316	NBE41AM-226X	TAN.CAPACITOR	22 10V
C318	NCB11AK-106X	CER.CAPACITOR	10 10V
C326	NBE41AM-226X	TAN.CAPACITOR	22 10V
C327	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C328	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C329	NEH91CM-106X	E.CAPACITOR	10 16V
C330	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C331	NCB11CK-105X	CER.CAPACITOR	1 16V
C333	NBE41CM-106X	TAN.CAPACITOR	10 16V
C334	NCB11CK-105X	CER.CAPACITOR	1 16V
C335	NCB11CK-105X	CER.CAPACITOR	1 16V
C336	NCB11CK-105X	CER.CAPACITOR	1 16V
C337	NCB11CK-105X	CER.CAPACITOR	1 16V
C338	NCB11CK-105X	CER.CAPACITOR	1 16V
C339	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C340	NCB31HK-682X	CER.CAPACITOR	6800p 50V
C341	NCB11AK-225X	CER.CAPACITOR	2.2 10V
C345	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C346	NBE41AM-226X	TAN.CAPACITOR	22 10V
C348	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C349	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C350	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C351	NCB11CK-105X	CER.CAPACITOR	1 16V
C352	NCB11AK-106X	CER.CAPACITOR	10 10V
C353	NCB11CK-105X	CER.CAPACITOR	1 16V
C354	NCB11CK-105X	CER.CAPACITOR	1 16V
C355	NCB11CK-105X	CER.CAPACITOR	1 16V
C360	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C361	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C502	NCB41EM-475X	CER.CAPACITOR	4.7 25V
C503	NCB41EM-475X	CER.CAPACITOR	4.7 25V
C504	NCB41EM-475X	CER.CAPACITOR	4.7 25V
C505	NCB41EM-475X	CER.CAPACITOR	4.7 25V
C506	NCB41CM-106X	CER.CAPACITOR	10 16V
C507	NCB41CM-106X	CER.CAPACITOR	10 16V
C508	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C510	NCB41EM-475X	CER.CAPACITOR	4.7 25V

Symbol No.	Part No.	Part Name	Description
C511	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C512	NCB41EM-475X	CER.CAPACITOR	4.7 25V
C513	NCB41EM-475X	CER.CAPACITOR	4.7 25V
C514	NCB41EM-475X	CER.CAPACITOR	4.7 25V
C515	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C516	NCB41CM-106X	CER.CAPACITOR	10 16V
C517	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C518	NCB41CM-106X	CER.CAPACITOR	10 16V
C520	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C521	NCB41CM-106X	CER.CAPACITOR	10 16V
C522	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C523	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C524	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C525	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C526	NEH91CM-226X	E.CAPACITOR	22 16V
C527	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C528	NEH91CM-226X	E.CAPACITOR	22 16V
C529	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C530	NEH91CM-226X	E.CAPACITOR	22 16V
C531	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C532	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C533	NEH91CM-226X	E.CAPACITOR	22 16V
C534	NCB41CM-106X	CER.CAPACITOR	10 16V
C535	NDC31HJ-100X	CER.CAPACITOR	10p 50V
C536	NDC31HJ-100X	CER.CAPACITOR	10p 50V
C537	NCB41CM-106X	CER.CAPACITOR	10 16V
C538	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C539	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C540	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C541	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C544	NCB41CM-106X	CER.CAPACITOR	10 16V
C545	NDC31HJ-100X	CER.CAPACITOR	10p 50V
C546	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C547	NEH91CM-226X	E.CAPACITOR	22 16V
C548	NEH91CM-226X	E.CAPACITOR	22 16V
C549	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C550	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C553	NCB41CM-106X	CER.CAPACITOR	10 16V
C554	NDC31HJ-100X	CER.CAPACITOR	10p 50V
C555	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C556	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C557	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C558	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C559	NRSA63J-103X	M.G.RESISTOR	0.01
C560	NRSA63J-103X	M.G.RESISTOR	0.01
C561	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C562	NEH91CM-106X	E.CAPACITOR	10 16V
C563	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C564	NEH91CM-106X	E.CAPACITOR	10 16V
C565	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C566	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C567	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C568	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C569	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C570	NEH91CM-106X	E.CAPACITOR	10 16V
C571	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C572	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C573	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C574	NEH91CM-106X	E.CAPACITOR	10 16V
C575	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C576	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C577	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C578	NEH91CM-106X	E.CAPACITOR	10 16V
C579	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C580	NEH91CM-106X	E.CAPACITOR	10 16V
C581	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C582	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C583	NEH91CM-106X	E.CAPACITOR	10 16V
C584	NEH91CM-106X	E.CAPACITOR	10 16V
C585	NCB41CM-106X	CER.CAPACITOR	10 16V
C586	NRS144J-0R0X	M.G.RESISTOR	0 1/16W
C587	NRS144J-0R0X	M.G.RESISTOR	0 1/16W

Symbol No.	Part No.	Part Name	Description
C588	NCB41CM-106X	CER.CAPACITOR	10 16V
C589	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C590	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C591	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C592	NCB41CM-106X	CER.CAPACITOR	10 16V
C593	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C594	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C595	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C596	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C597	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C598	NCB41CM-106X	CER.CAPACITOR	10 16V
C599	NCB41CM-106X	CER.CAPACITOR	10 16V
C600	NCB41CM-106X	CER.CAPACITOR	10 16V
C601	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C602	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C603	NCB41CM-106X	CER.CAPACITOR	10 16V
C604	NCB41CM-106X	CER.CAPACITOR	10 16V
C605	NCB41CM-106X	CER.CAPACITOR	10 16V
C606	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C607	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C608	NCB41CM-106X	CER.CAPACITOR	10 16V
C609	NEH91EM-226X	E.CAPACITOR	22 25V
C610	NCB41CM-106X	CER.CAPACITOR	10 16V
C611	NCB41CM-106X	CER.CAPACITOR	10 16V
C614	NCB41CM-106X	CER.CAPACITOR	10 16V
C615	NDC31HJ-100X	CER.CAPACITOR	10p 50V
C616	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C617	NEH91CM-106X	E.CAPACITOR	10 16V
C618	NEH91CM-106X	E.CAPACITOR	10 16V
C619	NEH91CM-106X	E.CAPACITOR	10 16V
C620	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C621	NCB41CM-106X	CER.CAPACITOR	10 16V
C622	NDC31HJ-100X	CER.CAPACITOR	10p 50V
C623	NEH91CM-106X	E.CAPACITOR	10 16V
C624	NCB41CM-106X	CER.CAPACITOR	10 16V
C625	NCB41CM-106X	CER.CAPACITOR	10 16V
C626	NCB41CM-106X	CER.CAPACITOR	10 16V
C627	NCB41EM-475X	CER.CAPACITOR	4.7 25V
C628	NCB41EM-475X	CER.CAPACITOR	4.7 25V
C629	NEH91CM-106X	E.CAPACITOR	10 16V
C630	NEH91CM-106X	E.CAPACITOR	10 16V
C631	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C632	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C633	NEH91EM-226X	E.CAPACITOR	22 25V
C634	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C635	NCB41CM-106X	CER.CAPACITOR	10 16V
C701	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C702	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C703	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C704	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C705	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C706	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C707	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C708	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C709	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C710	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C711	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C712	NCB31CK-104X	CER.CAPACITOR	0.1 16V
L302	NQL044K-101X	COIL	100uH
L303	NQL044K-101X	COIL	100uH
L501	NQL024J-100X	COIL	10uH
L502	NQL024J-100X	COIL	10uH
L503	NQL024J-100X	COIL	10uH
L504	NQL024J-100X	COIL	10uH
L506	NQL024J-100X	COIL	10uH
L507	NQL024J-100X	COIL	10uH
S1	NSW0070-002X	SLIDE SWITCH	AUDIO INPUT(F)
S2	NSW0070-002X	SLIDE SWITCH	AUDIO INPUT(R)
S3	NSW0070-001X	SLIDE SWITCH	AUD SELECT(CH1)
S4	NSW0070-001X	SLIDE SWITCH	AUD SELECT(CH2)
S501	NSW0070-002X	SLIDE SWITCH	MONITOR SELECT

Symbol No.	Part No.	Part Name	Description
S701	NSW0010-001X	SWITCH	EDIT SEARCH(R)
S702	NSW0010-001X	SWITCH	EDIT SEARCH(F)
S703	NSW0010-001X	SWITCH	LCD BRIGHT+
S704	NSW0010-001X	SWITCH	LCD BRIGHT-
S705	NSW0070-002X	SLIDE SWITCH	TC GENE.
S706	NSW0070-002X	SLIDE SWITCH	AUTO IRIS
S707	NSW0010-001X	SWITCH	STATUS
S708	NSW0070-001X	SLIDE SWITCH	COUNTER
S709	NSW0070-001X	SLIDE SWITCH	AUDIO SELECT(L)
S710	NSW0070-001X	SLIDE SWITCH	AUDIO SELECT(R)
S711	NSW0010-001X	SWITCH	LOLUX
S712	NSW0070-002X	SLIDE SWITCH	BLACK
S713	NSW0010-001X	SWITCH	FULL AUTO
S714	QSW0603-001	ROTARY SWITCH	SHUTTER
S715	NSW0010-001X	SWITCH	DISPLAY
CN26	QGF0508F1-20X	CONNECTOR	20PIN
CN27	QGF0508F1-33X	CONNECTOR	33PIN
CN28	QGF1012F1-08X	CONNECTOR	8PIN
CN29	QGA1201F2-10X	CONNECTOR	10PIN
CN30	QGA1201F2-04X	CONNECTOR	4PIN
CN31	QGA1201F2-03X	CONNECTOR	3PIN
CN32	QGA1201F2-02X	CONNECTOR	2PIN
CN38	QGA1201F2-05X	CONNECTOR	5PIN
CN41	QGA1201F2-03X	CONNECTOR	3PIN
CN303	QGF0508C1-30W	CONNECTOR	30PIN
TP5	NNZ0009-001X	TEST POINT	x29
K501	PGZ00627Z	FERRATE BEADS	
K502	PGZ00627Z	FERRATE BEADS	
K503	PGZ00627Z	FERRATE BEADS	
K504	PGZ00627Z	FERRATE BEADS	
TB501	PGZ02228	EARTH LUG	
TB502	PGZ02228	EARTH LUG	
TB503	PGZ02228	EARTH LUG	

6.7 M.RELAY BOARD ASSEMBLY PARTS LIST 07

CK270000B2

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Symbol No.	Part No.	Part Name	Description
S911	NSW0095-001X	DETECT SWITCH	LCD ON
CN303	QGF0508F1-30X	CONNECTOR	30PIN
CN911	QGF0305F1-33X	CONNECTOR	33PIN

6.8 M.BL BOARD ASSEMBLY PARTS LIST

CK270000B31

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Symbol No.	Part No.	Part Name	Description
Q907	2SC4626/BC/-X	TRANSISTOR	MATSUSHITA
Q908	2SC4626/BC/-X	TRANSISTOR	MATSUSHITA
Q909	2SC4626/BC/-X	TRANSISTOR	MATSUSHITA
Q910	DTA144EUA-X	TRANSISTOR	ROHM
Q911	2SD874/QR/-X	TRANSISTOR	MATSUSHITA
Q912	2SD874/QR/-X	TRANSISTOR	MATSUSHITA
R901	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R941	NRSA63J-563X	M.G.RESISTOR	56k 1/16W
R942	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R943	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R944	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R945	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R946	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R947	NRSA63J-563X	M.G.RESISTOR	56k 1/16W
R948	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R949	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R950	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
C958	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C959	NCB11CK-105X	CER.CAPACITOR	1 16V
C960	NDC31HJ-151X	CER.CAPACITOR	150p 50V
C961	NBE41CM-226X	TAN.CAPACITOR	22 16V
C962	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C963	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C964	NCB31HK-562X	CER.CAPACITOR	5600p 50V
C965	NFV41HJ-273X	FILM CAPACITOR	0.027 50V
C966	NCZ1016-220X	CER.CAPACITOR	22p
C967	NCZ1016-220X	CER.CAPACITOR	22p
C968	NCZ1016-220X	CER.CAPACITOR	22p
L907	NQLZ010-220X	COIL	22uH
L908	NQLZ010-220X	COIL	22uH
CN902	QGF0517F1-24X	CONNECTOR	24PIN
CN912	QGF0506F2-32X	CONNECTOR	32PIN
T901	NQS0037-001X	SW TRANSF	

6.9 DV/CPU BOARD ASSEMBLY PARTS LIST

LK2125-B0B

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Symbol No.	Part No.	Part Name	Description
IC1	JCY0132	I.C.(M)	JVC
IC2	TC7SH00FU-X	I.C.(M)	TOSHIBA
IC3	TC7SH00FU-X	I.C.(M)	TOSHIBA
IC101	TLC2940IPW-X	I.C.(M)	TEXAS
IC102	JCY0136-X	I.C.(M)	JVC
IC103	JCY0152	I.C.(M)	JVC
IC104	SN74AHC574PW-X	I.C.(M)	TEXAS
IC105	SN74AHC574PW-X	I.C.(M)	TEXAS
IC106	SN74AHC245DGV-X	I.C.(M)	TEXAS
IC107	TC7W53FU-X	I.C.(M)	TOSHIBA
IC301	M95320-WMN6-X	I.C.(M)	MITSUBISHI
IC302	PLSL1143-	MSD CPU	MN103SF33NY4
IC402	MM1571JN-X	I.C.(M)	MITSUMI
IC404	TC7W14FU-X	I.C.(M)	TOSHIBA
IC405	M62366GP-X	I.C.(M)	MITSUBISHI
Q102	DTA143EUA-X	TRANSISTOR	ROHM
Q402	DTA114EUA-X	TRANSISTOR	ROHM
Q403	DTA114EUA-X	TRANSISTOR	ROHM
Q404	DTA114EUA-X	TRANSISTOR	ROHM
Q405	DTA114EUA-X	TRANSISTOR	ROHM
Q406	UMC3N-W	TRANSISTOR	ROHM
Q407	UMC3N-W	TRANSISTOR	ROHM
Q408	UMC3N-W	TRANSISTOR	ROHM
Q409	UMC3N-W	TRANSISTOR	ROHM
Q410	DTA114EUA-X	TRANSISTOR	ROHM
Q411	2SA1577/PQ/-X	TRANSISTOR	ROHM
Q412	2SA1577/PQ/-X	TRANSISTOR	ROHM
D101	EC2C01C-X	DIODE ARRAY	SANYO
D102	EC2C01C-X	DIODE ARRAY	SANYO
D103	EC2C01C-X	DIODE ARRAY	SANYO
D401	DAN202U-X	DIODE	ROHM
D402	DAN202U-X	DIODE	ROHM
D403	DAN202U-X	DIODE	ROHM
R3	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R4	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R5	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R6	NRSA63J-241X	M.G.RESISTOR	240 1/16W
R7	NRSA63J-241X	M.G.RESISTOR	240 1/16W
R8	NRSA63J-241X	M.G.RESISTOR	240 1/16W
R9	NRSA63J-241X	M.G.RESISTOR	240 1/16W
R10	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R11	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R12	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R13	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R14	NRSA63D-560X	M.G.RESISTOR	56 1/16W
R101	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R104	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R105	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R106	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R107	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R108	NRSA63J-221X	M.G.RESISTOR	220 1/16W
R109	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R111	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R112	NRSA63J-151X	M.G.RESISTOR	150 1/16W
R113	NRSA63J-302X	M.G.RESISTOR	3k 1/16W
R114	NRSA63J-151X	M.G.RESISTOR	150 1/16W
R115	NRSA63J-302X	M.G.RESISTOR	3k 1/16W
R116	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R117	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R118	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R119	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R120	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
R121	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R122	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R123	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R124	NRSA63J-224X	M.G.RESISTOR	220k 1/16W
R126	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R127	NRSA63J-242X	M.G.RESISTOR	2.4k 1/16W
R128	NRSA63J-392X	M.G.RESISTOR	3.9k 1/16W

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Symbol No.	Part No.	Part Name	Description
R457	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R458	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R459	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R460	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R461	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R462	NRSA63J-125X	M.G.RESISTOR	1.2M 1/16W
R463	NRSA63J-824X	M.G.RESISTOR	820k 1/16W
R464	NRSA63J-275X	M.G.RESISTOR	2.7M 1/16W
R465	NRSA63J-824X	M.G.RESISTOR	820k 1/16W
R466	NRSA63J-275X	M.G.RESISTOR	2.7M 1/16W
R467	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R468	NRSA63J-125X	M.G.RESISTOR	1.2M 1/16W
R469	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R470	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R471	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R472	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R473	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R474	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R475	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R476	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R477	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R478	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R479	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R480	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R481	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R482	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R483	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R484	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R485	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R486	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R487	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R488	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R489	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R490	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R491	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R492	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R493	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R494	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R495	NRSA63D-273X	M.G.RESISTOR	27k 1/16W
R501	NRSA63J-333X	M.G.RESISTOR	33k 1/16W
RA101	NRZ0015-102X	RESISTOR ARRAY	1k
RA102	NRZ0015-103X	M.G.RESISTOR	10k
RA103	NRZ0015-103X	M.G.RESISTOR	10k
RA104	NRZ0015-330X	R.NETWORK	33
RA105	NRZ0015-330X	R.NETWORK	33
RA106	NRZ0015-330X	R.NETWORK	33
RA107	NRZ0015-330X	R.NETWORK	33
RA401	NRZ0015-101X	RESISTOR ARRAY	100
RA402	NRZ0015-101X	RESISTOR ARRAY	100
RA403	NRZ0015-101X	RESISTOR ARRAY	100
C1	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C2	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C3	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C4	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C5	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C6	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C7	NCB31CK-223X	CER.CAPACITOR	0.022 16V
C8	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C9	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C10	NBE21AM-106X	TAN.CAPACITOR	10 10V
C11	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C12	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C13	NBE21AM-106X	TAN.CAPACITOR	10 10V
C14	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C15	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C16	NBE41CM-106X	TAN.CAPACITOR	10 16V
C17	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C18	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C19	NBE41CM-106X	TAN.CAPACITOR	10 16V
C20	NCB31CK-104X	CER.CAPACITOR	0.1 16V

Symbol No.	Part No.	Part Name	Description
C21	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C22	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C23	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C24	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C25	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C26	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C27	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C28	NDC31HJ-102X	CER.CAPACITOR	1000p 50V
C29	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C30	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C31	NCB11CK-475X	CER.CAPACITOR	4.7 16V
C32	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C33	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C34	NCB11CK-475X	CER.CAPACITOR	4.7 16V
C35	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C101	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C102	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C103	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C104	NDC31HJ-151X	CER.CAPACITOR	150p 50V
C106	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C108	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C109	NBE21AM-106X	TAN.CAPACITOR	10 10V
C110	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C111	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C112	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C113	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C114	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C115	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C116	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C117	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C118	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C119	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C120	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C121	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C122	NDC31HJ-120X	CER.CAPACITOR	12p 50V
C123	NDC31HJ-120X	CER.CAPACITOR	12p 50V
C124	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C125	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C126	NDC31HJ-390X	CER.CAPACITOR	39p 50V
C127	NDC31HJ-102X	CER.CAPACITOR	1000p 50V
C128	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C129	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C130	NCB11CK-105X	CER.CAPACITOR	1 16V
C131	NCB11CK-475X	CER.CAPACITOR	4.7 16V
C133	NDC31HJ-271X	CER.CAPACITOR	270p 50V
C135	NCB31CK-473X	CER.CAPACITOR	0.047 16V
C136	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C137	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C138	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C139	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C140	NDC31HJ-390X	CER.CAPACITOR	39p 50V
C141	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C142	NDC31HJ-330X	CER.CAPACITOR	33p 50V
C143	NDC31HJ-6R0X	CER.CAPACITOR	6p 50V
C144	NDC31HJ-6R0X	CER.CAPACITOR	6p 50V
C145	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C146	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C147	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C148	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C149	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C150	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C151	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C152	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C154	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C155	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C156	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C301	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C302	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C303	NCF31AZ-105X	CER.CAPACITOR	1 10V
C304	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C305	NCF31AZ-105X	CER.CAPACITOR	1 10V
C306	NDC31HJ-150X	CER.CAPACITOR	15p 50V
C307	NDC31HJ-150X	CER.CAPACITOR	15p 50V

Symbol No.	Part No.	Part Name	Description
C308	NCF31AZ-105X	CER.CAPACITOR	1 10V
C309	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C310	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C311	NCF31AZ-105X	CER.CAPACITOR	1 10V
C312	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C313	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C401	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C402	NBE41CM-106X	TAN.CAPACITOR	10 16V
C403	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C406	NBE21AM-106X	TAN.CAPACITOR	10 10V
C407	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C408	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C409	NBE21AM-106X	TAN.CAPACITOR	10 10V
C410	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C411	NCB11CK-105X	CER.CAPACITOR	1 16V
C412	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C413	NBE21AM-106X	TAN.CAPACITOR	10 10V
C414	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C415	NBE21AM-106X	TAN.CAPACITOR	10 10V
C416	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C419	NBE21AM-106X	TAN.CAPACITOR	10 10V
C420	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C421	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C422	NBE21AM-106X	TAN.CAPACITOR	10 10V
C423	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C424	NBE21AM-106X	TAN.CAPACITOR	10 10V
C425	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C426	NBE21AM-106X	TAN.CAPACITOR	10 10V
C427	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C428	NBE21AM-106X	TAN.CAPACITOR	10 10V
C429	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C430	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C432	NCB11CK-105X	CER.CAPACITOR	1 16V
C433	NCB11CK-105X	CER.CAPACITOR	1 16V
C434	NBE21AM-106X	TAN.CAPACITOR	10 10V
C435	NBE21AM-106X	TAN.CAPACITOR	10 10V
C436	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C437	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C438	NCB31CK-223X	CER.CAPACITOR	0.022 16V
C439	NCB31CK-223X	CER.CAPACITOR	0.022 16V
C442	NCB31CK-223X	CER.CAPACITOR	0.022 16V
C443	NCB31CK-223X	CER.CAPACITOR	0.022 16V
C444	NCB31CK-223X	CER.CAPACITOR	0.022 16V
C445	NCB31CK-223X	CER.CAPACITOR	0.022 16V
C446	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C447	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C448	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C449	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C450	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C451	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C452	NBE21AM-106X	TAN.CAPACITOR	10 10V
C453	NCB31CK-104X	CER.CAPACITOR	0.1 16V
L1	NQL044K-100X	COIL	10uH
L2	NQL044K-100X	COIL	10uH
L3	NQL044K-100X	COIL	10uH
L4	NQL044K-100X	COIL	10uH
L101	NQL024J-2R2X	COIL	2.2uH
L102	NQR0276-001X	COIL	000uH
L103	NQL024J-120X	COIL	12uH
L104	NQL024J-100X	COIL	10uH
L105	NQL044K-100X	COIL	10uH
L402	NQL044K-100X	COIL	10uH
L403	NQL044K-100X	COIL	10uH
L404	NQL044K-100X	COIL	10uH
L405	NQL044K-100X	COIL	10uH
L406	NQL044K-100X	COIL	10uH
L408	NQL044K-100X	COIL	10uH
LC401	NQR0436-001X	LC FILTER	
LC402	NQR0436-001X	LC FILTER	

Symbol No.	Part No.	Part Name	Description
LC403	NQR0436-001X	LC FILTER	
LC404	NQR0436-001X	LC FILTER	
LC405	NQR0436-001X	LC FILTER	
X101	NAX0141-001X	CRYSTAL	41.850MHz
X102	NAX0206-001X	CRYSTAL	24.576MHz
X301	NAX0348-001X	CRYSTAL	27.000MHz
CN101	QGA1201F2-06X	CONNECTOR	6PIN
CN102	QGF0508C1-30W	CONNECTOR	30PIN
CN103	QGF0508C1-45W	CONNECTOR	45PIN
CN104	QGF0508C1-13W	CONNECTOR	13PIN
CN105	QGF0508C1-26W	CONNECTOR	26PIN
CN106	QGF0508C1-20W	CONNECTOR	20PIN
CN107	QGF0503F4-08X	CONNECTOR	8PIN
CN108	QGA1501F2-08W	CONNECTOR	8PIN
TP1	NNZ0071-001X	TEST POINT	TP1-TP3
K1	NQR0265-001X	FERAITE BEADS	
K101	NQR0265-001X	FERAITE BEADS	
K103	NQR0265-001X	FERAITE BEADS	
K401	NQR0265-001X	FERAITE BEADS	
K402	NQR0265-001X	FERAITE BEADS	

6.10 MDA/DC BOARD ASSEMBLY PARTS LIST 12

LK2124A0B

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Symbol No.	Part No.	Part Name	Description
IC11	BA6865KV	I.C.(M)	ROHM
IC12	BA6417F-X	I.C.(M)	ROHM
IC21	BA6862FS-X	I.C.(M)	ROHM
IC22	BA10358F-XE	I.C.(M)	ROHM
IC23	BA10393F-XE	I.C.(M)	ROHM
IC31	BA9743AFV-X	I.C.(M)	ROHM
IC32	BA9743AFV-X	I.C.(M)	ROHM
IC41	BA9743AFV-X	I.C.(M)	ROHM
IC42	MM1572KN-X	I.C.(M)	MITSUM
IC43	MM1572FN-X	I.C.(M)	MITSUM
Q11	2SB1302/ST-X	TRANSISTOR	SANYO
Q12	2SB1302/ST-X	TRANSISTOR	SANYO
Q13	2SB1302/ST-X	TRANSISTOR	SANYO
Q14	2SC4081/ORS-X	TRANSISTOR	ROHM
Q15	2SC4081/ORS-X	TRANSISTOR	ROHM
Q21	2SB1302/ST-X	TRANSISTOR	SANYO
Q22	2SB1302/ST-X	TRANSISTOR	SANYO
Q23	2SB1302/ST-X	TRANSISTOR	SANYO
Q31	2SJ484WY-X	FET	HITACHI
Q32	2SJ484WY-X	FET	HITACHI
Q33	2SJ484WY-X	FET	HITACHI
Q34	DTC124EUA-X	TRANSISTOR	ROHM
Q35	2SB1302/ST-X	TRANSISTOR	SANYO
Q36	2SJ484WY-X	FET	HITACHI
Q37	DTA114EUA-X	TRANSISTOR	ROHM
Q41	2SJ484WY-X	FET	HITACHI
Q42	2SJ484WY-X	FET	HITACHI
Q43	2SC4097/QR-X	TRANSISTOR	ROHM
Q44	2SA1577/QR-X	TRANSISTOR	ROHM
Q45	2SC4097/QR-X	TRANSISTOR	ROHM
Q46	2SA1577/QR-X	TRANSISTOR	ROHM
Q51	2SC4097/QR-X	TRANSISTOR	ROHM
Q52	2SA1577/QR-X	TRANSISTOR	ROHM
Q53	2SC4097/QR-X	TRANSISTOR	ROHM
Q54	2SA1577/QR-X	TRANSISTOR	ROHM
Q55	2SC4097/QR-X	TRANSISTOR	ROHM
Q56	2SA1577/QR-X	TRANSISTOR	ROHM
Q57	2SC4097/QR-X	TRANSISTOR	ROHM
Q58	2SA1577/QR-X	TRANSISTOR	ROHM

1 2 [MD/DC]

Symbol No.	Part No.	Part Name	Description
D11	DAP222-X	DIODE	ROHM
D12	MA3110/LJ-X	ZENER DIODE	MATSUSHITA
D13	DAP222-X	DIODE	ROHM
D22	MA3020-X	ZENER DIODE	MATSUSHITA
D31	SFPB-72-WV	SB DIODE	SANKEN
D32	SFPB-72-WV	SB DIODE	SANKEN
D33	DAP202U-X	DIODE	ROHM
D34	SFPB-72-WV	SB DIODE	SANKEN
D35	DA204U-X	DIODE	ROHM
D36	SFPB-72-WV	SB DIODE	SANKEN
D37	DAP202U-X	DIODE	ROHM
D41	SFPB-72-WV	SB DIODE	SANKEN
D42	SFPB-72-WV	SB DIODE	SANKEN
R101	NRSA63J-155X	M.G.RESISTOR	1.5M 1/16W
R102	NRSA63J-274X	M.G.RESISTOR	270k 1/16W
R103	NRSA63J-681X	M.G.RESISTOR	680 1/16W
R104	NRSA63J-272X	M.G.RESISTOR	2.7k 1/16W
R105	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R106	NRSA63J-511X	M.G.RESISTOR	510 1/16W
R107	NRSA63J-511X	M.G.RESISTOR	510 1/16W
R108	NRSA63J-511X	M.G.RESISTOR	510 1/16W
R109	NRSA63J-511X	M.G.RESISTOR	510 1/16W
R110	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R111	NRV142F-R22X	C.M.F.RESISTOR	0.22 1/4W
R112	NRS12BK-R68X	M.G.RESISTOR	0.68 1/2W
R113	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R114	NRSA63J-154X	M.G.RESISTOR	150k 1/16W
R115	NRSA63J-202X	M.G.RESISTOR	2k 1/16W
R116	NRSA63J-474X	M.G.RESISTOR	470k 1/16W
R117	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R118	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R120	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R121	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R122	NRSA63J-203X	M.G.RESISTOR	20k 1/16W
R123	NRSA63J-393X	M.G.RESISTOR	39k 1/16W
R124	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R125	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R126	NRSA63J-274X	M.G.RESISTOR	270k 1/16W
R127	NRSA63J-272X	M.G.RESISTOR	2.7k 1/16W
R128	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R131	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R132	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R133	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R134	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R135	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R136	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R138	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R139	NRS12BK-R68X	M.G.RESISTOR	0.68 1/2W
R201	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R202	NRSA63J-474X	M.G.RESISTOR	470k 1/16W
R203	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R204	NRSA63J-124X	M.G.RESISTOR	120k 1/16W
R205	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R206	NRSA63J-154X	M.G.RESISTOR	150k 1/16W
R207	NRSA63J-272X	M.G.RESISTOR	2.7k 1/16W
R208	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R209	NRS144J-1R0X	M.G.RESISTOR	1 1/4W
R210	NRS144J-1R0X	M.G.RESISTOR	1 1/4W
R211	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R212	NRSA63J-393X	M.G.RESISTOR	39k 1/16W
R213	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R214	NRSA63J-273X	M.G.RESISTOR	27k 1/16W
R215	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R216	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R217	NRSA63J-121X	M.G.RESISTOR	120 1/16W
R218	NRSA63J-121X	M.G.RESISTOR	120 1/16W
R219	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R220	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R221	NRSA63J-474X	M.G.RESISTOR	470k 1/16W
R222	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R223	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R224	NRSA63J-103X	M.G.RESISTOR	10k 1/16W

Symbol No.	Part No.	Part Name	Description
R225	NRSA63J-563X	M.G.RESISTOR	56k 1/16W
R226	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R227	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R228	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R229	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R230	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R301	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R302	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R303	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R304	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R305	NRSA63J-333X	M.G.RESISTOR	33k 1/16W
R306	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R307	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R308	NRSA63J-683X	M.G.RESISTOR	68k 1/16W
R309	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
R310	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R311	NRSA63J-393X	M.G.RESISTOR	39k 1/16W
R312	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R313	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R314	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R315	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
R316	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R317	NRSA63J-823X	M.G.RESISTOR	82k 1/16W
R318	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R319	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R320	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R321	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R322	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R323	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R324	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R325	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R326	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R327	NRSA63J-152X	M.G.RESISTOR	1.5k 1/16W
R328	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R329	NRSA63J-563X	M.G.RESISTOR	56k 1/16W
R330	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R331	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R332	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R333	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R334	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R335	NRSA63J-333X	M.G.RESISTOR	33k 1/16W
R336	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
R337	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R338	NRSA63J-333X	M.G.RESISTOR	33k 1/16W
R339	NRSA63J-563X	M.G.RESISTOR	56k 1/16W
R340	NRSA63J-823X	M.G.RESISTOR	82k 1/16W
R341	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R342	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R343	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R344	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R345	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R346	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R351	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R401	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R402	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R403	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R404	NRSA63D-472X	M.G.RESISTOR	4.7k 1/16W
R405	NRSA63D-332X	M.G.RESISTOR	3.3k 1/16W
R406	NRSA63D-472X	M.G.RESISTOR	4.7k 1/16W
R407	NRSA63D-472X	M.G.RESISTOR	4.7k 1/16W
R408	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R409	NRSA63D-273X	M.G.RESISTOR	27k 1/16W
R410	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R411	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R412	NRSA63D-182X	M.G.RESISTOR	1.8k 1/16W
R413	NRSA63D-182X	M.G.RESISTOR	1.8k 1/16W
R414	NRSA63D-122X	M.G.RESISTOR	1.2k 1/16W
R415	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R416	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R417	NRSA63D-562X	M.G.RESISTOR	5.6k 1/16W
R418	NRSA63D-272X	M.G.RESISTOR	2.7k 1/16W
R419	NRSA63J-330X	M.G.RESISTOR	33 1/16W

Symbol No.	Part No.	Part Name	Description	
R420	NRSA63J-100X	M.G.RESISTOR	10	1/16W
R421	NRSA63J-100X	M.G.RESISTOR	10	1/16W
C104	NBE21AM-106X	TAN.CAPACITOR	10	10V
C105	NEH91CM-106X	E.CAPACITOR	10	16V
C106	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C107	NCB31HK-152X	CER.CAPACITOR	1500p	50V
C108	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C109	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C120	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C121	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C122	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C123	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C124	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C125	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C126	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C127	NCB31AK-224X	CER.CAPACITOR	0.22	10V
C128	NCB31AK-224X	CER.CAPACITOR	0.22	10V
C129	NCB31AK-224X	CER.CAPACITOR	0.22	10V
C130	NEH91CM-106X	E.CAPACITOR	10	16V
C131	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C132	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C133	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C134	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C135	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C136	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C137	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C138	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C139	NEH90JM-226X	E.CAPACITOR	22	6.3V
C140	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C142	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C143	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C144	NCB31CK-473X	CER.CAPACITOR	0.047	16V
C145	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C147	NCB11CK-105X	CER.CAPACITOR	1	16V
C148	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C149	NEH90JM-226X	E.CAPACITOR	22	6.3V
C156	NCB11CK-105X	CER.CAPACITOR	1	16V
C157	NDC31HJ-102X	CER.CAPACITOR	1000p	50V
C158	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C159	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C160	NDC31HJ-471X	CER.CAPACITOR	470p	50V
C201	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C202	NEH91CM-106X	E.CAPACITOR	10	16V
C203	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C204	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C205	NCB31HK-153X	CER.CAPACITOR	0.015	50V
C206	NCB31CK-273X	CER.CAPACITOR	0.027	16V
C207	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C209	NCF31AZ-105X	CER.CAPACITOR	1	10V
C210	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C211	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C212	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C213	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C214	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C215	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C216	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C217	NCF31AZ-105X	CER.CAPACITOR	1	10V
C218	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C219	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C220	NCF31AZ-105X	CER.CAPACITOR	1	10V
C221	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C301	NEH91VM-106X	E.CAPACITOR	10	35V
C303	NDC31HJ-221X	CER.CAPACITOR	220p	50V
C304	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C305	NCB11CK-475X	CER.CAPACITOR	4.7	16V
C306	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C307	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C308	NCB11CK-105X	CER.CAPACITOR	1	16V
C309	NBE21DM-475X	TAN.CAPACITOR	4.7	20V
C311	NCB11CK-105X	CER.CAPACITOR	1	16V
C312	NBE21DM-475X	TAN.CAPACITOR	4.7	20V
C313	NDC31HJ-102X	CER.CAPACITOR	1000p	50V

Symbol No.	Part No.	Part Name	Description	
C314	NDC31HJ-221X	CER.CAPACITOR	220p	50V
C315	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C316	NCB11CK-475X	CER.CAPACITOR	4.7	16V
C317	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C318	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C319	NCB11CK-105X	CER.CAPACITOR	1	16V
C320	NCB11CK-475X	CER.CAPACITOR	4.7	16V
C321	NCB11CK-105X	CER.CAPACITOR	1	16V
C322	NCB11CK-475X	CER.CAPACITOR	4.7	16V
C323	NDC31HJ-102X	CER.CAPACITOR	1000p	50V
C401	NDC31HJ-221X	CER.CAPACITOR	220p	50V
C402	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C403	NCB11CK-475X	CER.CAPACITOR	4.7	16V
C404	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C405	NCF31AZ-105X	CER.CAPACITOR	1	10V
C407	NCF11CZ-225X	CER.CAPACITOR	2.2	16V
C408	NCF31AZ-105X	CER.CAPACITOR	1	10V
C409	NCB11CK-105X	CER.CAPACITOR	1	16V
C410	NCB10JK-106X	CER.CAPACITOR	10	6.3V
C411	NCB10JK-106X	CER.CAPACITOR	10	6.3V
C412	NCB10JK-106X	CER.CAPACITOR	10	6.3V
C413	NCB31AK-224X	CER.CAPACITOR	0.22	10V
C414	NCB10JK-106X	CER.CAPACITOR	10	6.3V
C415	NCB10JK-106X	CER.CAPACITOR	10	6.3V
C416	NCB11CK-105X	CER.CAPACITOR	1	16V
C417	NBE21AM-106X	TAN.CAPACITOR	10	10V
C418	NBE21AM-106X	TAN.CAPACITOR	10	10V
C419	NBE21AM-106X	TAN.CAPACITOR	10	10V
C420	NCB31AK-224X	CER.CAPACITOR	0.22	10V
C421	NCB10JK-106X	CER.CAPACITOR	10	6.3V
C422	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C423	NBE21AM-106X	TAN.CAPACITOR	10	10V
C424	NBE21AM-106X	TAN.CAPACITOR	10	10V
C425	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C426	NBE21AM-106X	TAN.CAPACITOR	10	10V
C427	NBE21AM-106X	TAN.CAPACITOR	10	10V
L21	NQL24CN-220X	COIL	22uH	
L31	NQL42EM-220X	COIL	22uH	
L33	NQL24CN-220X	COIL	22uH	
L34	NQL24CN-220X	COIL	22uH	
L35	NQL24CN-220X	COIL	22uH	
L36	NQL24CN-220X	COIL	22uH	
L41	NQL24CN-220X	COIL	22uH	
L42	NQL24CN-220X	COIL	22uH	
L43	NQL24CN-220X	COIL	22uH	
L44	NQL24CN-220X	COIL	22uH	
L45	NQL24CN-220X	COIL	22uH	
LC11	NQR0436-001X	LC FILTER		
IF1	NMFZ011-1R6X-S	FUSE	1.6A	
CN105	QGF0508C1-26W	CONNECTOR	26PIN	
CN108	QGA1501C2-08W	CONNECTOR	8PIN	
CN111	SS30662-004	CONNECTOR	4PIN	
CN112	QGF0508C1-12W	CONNECTOR	12PIN	
CN113	QGF0508C1-18W	CONNECTOR	18PIN	
CN114	QGA1201C2-02X	CONNECTOR	2PIN	
CN116	QGF0508C1-20W	CONNECTOR	20PIN	
CN117	QGA1501C2-02W	CONNECTOR	2PIN	
CN119	QGA1201C2-02X	CONNECTOR	2PIN	
K1	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
QA11	BA6254FS-X	TRANSIST.ARRAY		

6.11 MECHA BOARD ASSEMBLY PARTS LIST 1 3

LK2123A0A1

1 3

Symbol No.	Part No.	Part Name	Description
VR1	NVQ0006-B14X	VAL.RESISTOR	10k MODE SENSOR
TH1	NAD0002-223X	THERMISTOR	22k
S1	NSW0171-001	PUSH SWITCH	
S2	NSW0170-001	PUSH SWITCH	
S3	NSW0170-001	PUSH SWITCH	
CN104	QGF0508F1-13X	CONNECTOR	13PIN
CN106	QGF0508F1-20X	CONNECTOR	20PIN
CN116	QGF0508F1-20X	CONNECTOR	20PIN
CN124	QGF0508F1-18X	CONNECTOR	18PIN
CN125	QGF0508F2-10X	CONNECTOR	10PIN
CN128	QGA1201C2-02X	CONNECTOR	2PIN

6.12 MECHA CONN BOARD ASSEMBLY PARTS LIST 1 4

LK2123A0A2

1 4

Symbol No.	Part No.	Part Name	Description
CN100	QGF0508F1-11X	CONNECTOR	11PIN
CN112	QGF0508C1-12W	CONNECTOR	12PIN

6.13 PSIF BOARD ASSEMBLY PARTS LIST 2 0

CK270100B1

2 0

Symbol No.	Part No.	Part Name	Description
IC2	TC7V00FU-X	I.C.(M)	TOSHIBA
IC3	TC74HC4538AFT-X	I.C.(M)	TOSHIBA
IC4	MB3886PFV	I.C.(M)	FUJITSU
IC5	LP3965EMP-ADJ-X	I.C.(M)	NATIONAL SEMICO
IC6	MB3785APFV	I.C.(M)	FUJITSU
IC7	NJM78L12UA-X	I.C.(M)	JRC
IC8	NJM79L08UA-X	I.C.(M)	JRC
IC9	NJM79L05UA-X	I.C.(M)	JRC
IC10	SN74AHC245DGV-X	I.C.(M)	TEXAS
IC11	SN74AHC245DGV-X	I.C.(M)	TEXAS
IC12	TC7VH245FU-X	I.C.(M)	TOSHIBA
IC13	NJM2903M-XE	I.C.(M)	JRC
Q1	HAT1020R-X	TRANSISTOR	HITACHI
Q2	2SA1576A/QRS/-X	TRANSISTOR	ROHM
Q3	2SC4081/QRS/-X	TRANSISTOR	ROHM
Q4	2SC4081/QRS/-X	TRANSISTOR	ROHM
Q5	2SA1576A/QRS/-X	TRANSISTOR	ROHM
Q6	DTC124EUA-X	TRANSISTOR	ROHM
Q7	DTC124EUA-X	TRANSISTOR	ROHM
Q8	RDS035L03-X	TRANSISTOR	ROHM
Q9	RDS035L03-X	TRANSISTOR	ROHM
Q10	2SA2013-X	TRANSISTOR	SANYO
Q11	2SA2013-X	TRANSISTOR	SANYO
Q12	2SA2013-X	TRANSISTOR	SANYO
Q13	2SA2013-X	TRANSISTOR	SANYO
Q14	2SC4081/QRS/-X	TRANSISTOR	ROHM
Q15	2SC4081/QRS/-X	TRANSISTOR	ROHM
Q16	2SC4081/QRS/-X	TRANSISTOR	ROHM
Q17	2SB1189-W	TRANSISTOR	ROHM
D2	1SS355-X	DIODE	ROHM
D3	MA736-X	DIODE	MATSUSHITA
D4	MA736-X	DIODE	MATSUSHITA
D5	MA738-X	DIODE	MATSUSHITA
D6	MA738-X	DIODE	MATSUSHITA
D7	MA736-X	DIODE	MATSUSHITA
D8	1SS306-X	DIODE	TOSHIBA
D10	MA736-X	DIODE	MATSUSHITA
D11	MA736-X	DIODE	MATSUSHITA

Symbol No.	Part No.	Part Name	Description
D12	MA736-X	DIODE	MATSUSHITA
D13	MA736-X	DIODE	MATSUSHITA
D16	1SS355-X	DIODE	ROHM
D17	1SS355-X	DIODE	ROHM
D18	HZU5CLL-X	ZENER DIODE	HITACHI
D19	1SS355-X	DIODE	ROHM
R1	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R2	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R3	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R4	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R5	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R6	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R7	NRSA63J-182X	M.G.RESISTOR	1.8k 1/16W
R8	NRSA63D-102X	M.G.RESISTOR	1k 1/16W
R9	NRSA63J-124X	M.G.RESISTOR	120k 1/16W
R10	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R11	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R12	NRSA63J-684X	M.G.RESISTOR	680k 1/16W
R14	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R15	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R16	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R17	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R18	NRSA63J-272X	M.G.RESISTOR	2.7k 1/16W
R19	NRSA63D-912X	M.G.RESISTOR	9.1k 1/16W
R21	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
R22	NRSA63D-183X	M.G.RESISTOR	18k 1/16W
R23	NRSA63D-223X	M.G.RESISTOR	22k 1/16W
R24	NRSA63D-562X	M.G.RESISTOR	5.6k 1/16W
R25	NRSA63D-912X	M.G.RESISTOR	9.1k 1/16W
R26	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
R27	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R28	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R30	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
R31	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R33	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R34	NRSA63J-152X	M.G.RESISTOR	1.5k 1/16W
R35	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R36	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R37	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R38	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R39	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R40	NRSA63D-123X	M.G.RESISTOR	12k 1/16W
R41	NRSA63D-203X	M.G.RESISTOR	20k 1/16W
R43	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R44	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R45	NRSA63J-563X	M.G.RESISTOR	56k 1/16W
R46	NRSA63J-124X	M.G.RESISTOR	120k 1/16W
R48	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
R49	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R50	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R51	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R52	NRSA63D-912X	M.G.RESISTOR	9.1k 1/16W
R53	NRSA63D-912X	M.G.RESISTOR	9.1k 1/16W
R54	NRSA63D-223X	M.G.RESISTOR	22k 1/16W
R55	NRSA63J-563X	M.G.RESISTOR	56k 1/16W
R56	NRSA63J-823X	M.G.RESISTOR	82k 1/16W
R57	NRSA63J-124X	M.G.RESISTOR	120k 1/16W
R59	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
R60	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R61	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R62	NRSA63D-102X	M.G.RESISTOR	1k 1/16W
R63	NRSA63D-223X	M.G.RESISTOR	22k 1/16W
R64	NRSA63D-223X	M.G.RESISTOR	22k 1/16W
R65	NRSA63J-393X	M.G.RESISTOR	39k 1/16W
R66	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R67	NRSA63D-682X	M.G.RESISTOR	6.8k 1/16W
R68	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R69	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R70	NRSA63D-223X	M.G.RESISTOR	22k 1/16W
R71	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R72	NRSA63D-103X	M.G.RESISTOR	10k 1/16W

Symbol No.	Part No.	Part Name	Description
R73	NRSA63J-333X	M.G.RESISTOR	33k 1/16W
R74	NRSA63D-682X	M.G.RESISTOR	6.8k 1/16W
R75	NRSA63D-683X	M.G.RESISTOR	68k 1/16W
R76	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R77	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R78	NRSA63D-102X	M.G.RESISTOR	1k 1/16W
R79	NRSA63J-562X	M.G.RESISTOR	5.6k 1/16W
R81	NRSA63D-203X	M.G.RESISTOR	20k 1/16W
R82	NRSA63J-563X	M.G.RESISTOR	56k 1/16W
R83	NRSA63J-274X	M.G.RESISTOR	270k 1/16W
R84	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R85	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R86	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R87	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R88	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R90	NRSA63D-223X	M.G.RESISTOR	22k 1/16W
R91	NRSA63J-393X	M.G.RESISTOR	39k 1/16W
R92	NRSA63J-393X	M.G.RESISTOR	39k 1/16W
R94	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R95	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R96	NRSA63J-271X	M.G.RESISTOR	270 1/16W
R97	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R98	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R99	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R100	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R101	NRSA63J-271X	M.G.RESISTOR	270 1/16W
R103	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R104	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R105	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R106	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R107	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R108	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R109	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R110	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R111	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R112	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R113	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R114	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R115	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R116	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R117	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R118	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R119	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R120	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R121	NRSA63D-223X	M.G.RESISTOR	22k 1/16W
R122	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R123	NRSA63J-334X	M.G.RESISTOR	330k 1/16W
R124	NRSA63J-334X	M.G.RESISTOR	330k 1/16W
R125	NRSA63J-225X	M.G.RESISTOR	2.2M 1/16W
R126	NRSA63D-223X	M.G.RESISTOR	22k 1/16W
R127	NRSA63J-334X	M.G.RESISTOR	330k 1/16W
R128	NRSA63J-124X	M.G.RESISTOR	120k 1/16W
R129	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R130	NRSA63J-334X	M.G.RESISTOR	330k 1/16W
R131	NRSA63J-274X	M.G.RESISTOR	270k 1/16W
R132	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R135	NRSA63D-123X	M.G.RESISTOR	12k 1/16W
R136	NRSA63J-334X	M.G.RESISTOR	330k 1/16W
R137	NRSA63J-124X	M.G.RESISTOR	120k 1/16W
R138	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R139	NRSA63D-682X	M.G.RESISTOR	6.8k 1/16W
R140	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R141	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R143	NRSA63J-182X	M.G.RESISTOR	1.8k 1/16W
R144	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R145	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R146	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R149	NRSA63D-682X	M.G.RESISTOR	6.8k 1/16W
R150	NRSA63D-682X	M.G.RESISTOR	6.8k 1/16W
C1	NCB11EK-105X	CER.CAPACITOR	1 25V
C2	NCB11EK-105X	CER.CAPACITOR	1 25V

Symbol No.	Part No.	Part Name	Description
C3	NCB11CK-105X	CER.CAPACITOR	1 16V
C4	NCB31EK-103X	CER.CAPACITOR	0.01 25V
C5	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C6	NCB11CK-105X	CER.CAPACITOR	1 16V
C7	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C8	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C9	NCB31EK-103X	CER.CAPACITOR	0.01 25V
C10	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C11	NDC31HJ-331X	CER.CAPACITOR	330p 50V
C12	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C13	NCB31CK-473X	CER.CAPACITOR	0.047 16V
C14	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C15	NCB11AK-475X	CER.CAPACITOR	4.7 10V
C16	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C17	NCB31CK-473X	CER.CAPACITOR	0.047 16V
C18	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C19	NCB31EK-103X	CER.CAPACITOR	0.01 25V
C20	NCB11EK-105X	CER.CAPACITOR	1 25V
C21	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C22	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C23	NBZ0008-826X	TAN.CAPACITOR	82
C24	NBE51CM-336X	TAN.CAPACITOR	33 16V
C25	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C26	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C27	NBE41AM-336X	TAN.CAPACITOR	33 10V
C28	NBZ0009-566X	TAN.CAPACITOR	56
C29	NBE51CM-336X	TAN.CAPACITOR	33 16V
C30	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C31	NBZ0017-226X	TAN.CAPACITOR	22
C32	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C33	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C34	NCB31EK-103X	CER.CAPACITOR	0.01 25V
C35	NCB31CK-473X	CER.CAPACITOR	0.047 16V
C36	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C37	NCB31CK-473X	CER.CAPACITOR	0.047 16V
C38	NDC31HJ-271X	CER.CAPACITOR	270p 50V
C39	NCB11EK-105X	CER.CAPACITOR	1 25V
C40	NCB11CK-105X	CER.CAPACITOR	1 16V
C41	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C42	NCB31EK-103X	CER.CAPACITOR	0.01 25V
C43	NCB31CK-473X	CER.CAPACITOR	0.047 16V
C44	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C45	NCB31EK-103X	CER.CAPACITOR	0.01 25V
C46	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C47	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C48	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C49	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C50	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C51	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C52	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C53	NBZ0017-226X	TAN.CAPACITOR	22
C54	NBZ0009-566X	TAN.CAPACITOR	56
C55	NBE41AM-336X	TAN.CAPACITOR	33 10V
C56	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C59	NEL61JM-226X	E.CAPACITOR	22 63V
C60	NEL61JM-226X	E.CAPACITOR	22 63V
C61	NCB41EM-475X	CER.CAPACITOR	4.7 25V
C62	NCB41EM-475X	CER.CAPACITOR	4.7 25V
C63	NCB11CK-105X	CER.CAPACITOR	1 16V
C64	NCB41CM-106X	CER.CAPACITOR	10 16V
C65	NCB11CK-105X	CER.CAPACITOR	1 16V
C66	NBZ0010-396X	TAN.CAPACITOR	39
C67	NCB41CM-106X	CER.CAPACITOR	10 16V
C68	NBZ0010-396X	TAN.CAPACITOR	39
C69	NCB41CM-106X	CER.CAPACITOR	10 16V
C70	NCB11AK-475X	CER.CAPACITOR	4.7 10V
C71	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C72	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C73	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C74	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C75	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C76	NCB11CK-105X	CER.CAPACITOR	1 16V
C77	NCB31CK-104X	CER.CAPACITOR	0.1 16V

6.14 PJNC BOARD ASSEMBLY PARTS LIST 21

CK270100B2

21

20PSIFJ

Symbol No.	Part No.	Part Name	Description
C78	NCB31EK-103X	CER.CAPACITOR	0.01 25V
C79	NCB31EK-103X	CER.CAPACITOR	0.01 25V
C80	NCB11AK-475X	CER.CAPACITOR	4.7 10V
C81	NCB31HK-152X	CER.CAPACITOR	1500p 50V
C82	NCB31HK-152X	CER.CAPACITOR	1500p 50V
C84	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C85	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C86	NCB31CK-473X	CER.CAPACITOR	0.047 16V
C87	NCB31AK-154X	CER.CAPACITOR	0.15 10V
C88	NCB31CK-473X	CER.CAPACITOR	0.047 16V
C89	NCB31EK-103X	CER.CAPACITOR	0.01 25V
L1	NQL47CM-330X	COIL	33uH
L2	NQL114K-220X	COIL	22uH
L3	NQL47CM-330X	COIL	33uH
L4	NQL44CM-220X	COIL	22uH
L5	NQL47CM-680X	COIL	68uH
L6	NQL44CM-220X	COIL	22uH
L7	NQL114K-220X	COIL	22uH
L8	NQL44CM-470X	COIL	47uH
L9	NQL44CM-220X	COIL	22uH
L10	NQL114K-220X	COIL	22uH
L11	NQL44CM-101X	COIL	100uH
L12	NQL44CM-220X	COIL	22uH
L13	NQL44CM-330X	COIL	33uH
L14	NQL44CM-220X	COIL	22uH
F1	NMFZ011-2R0X-S	FUSE	2A63V
F2	NMFZ011-2R0X-S	FUSE	2A63V
CN12	QGB1209M3-52	CONNECTOR	52PIN
CN14	QGF0508F1-30X	CONNECTOR	30PIN
CN15	QGA1201C2-13X	CONNECTOR	13PIN
CN18	QGA1201C2-11X	CONNECTOR	11PIN
CN101	QGA1201F2-06X	CONNECTOR	6PIN
T1	NQR0471-001X	D/D CON TRANS	
TB1	PGZ02228	EARTH LUG	
TB2	PGZ02228	EARTH LUG	
VA1	NAF0008-171X	VARISTOR	
VA2	NAF0008-171X	VARISTOR	
VA3	NAF0008-171X	VARISTOR	
VA4	NAF0008-171X	VARISTOR	
VA5	NAF0008-171X	VARISTOR	
VA6	NAF0008-171X	VARISTOR	
VA7	NAF0008-171X	VARISTOR	
VA8	NAF0008-171X	VARISTOR	
VA9	NAF0008-171X	VARISTOR	
VA10	NAF0008-171X	VARISTOR	
VA11	NAF0008-171X	VARISTOR	
VA12	NAF0008-171X	VARISTOR	
VA13	NAF0008-171X	VARISTOR	
VA14	NAF0008-171X	VARISTOR	
VA15	NAF0008-171X	VARISTOR	
VA16	NAF0008-171X	VARISTOR	
VA17	NAF0008-171X	VARISTOR	
VA18	NAF0008-171X	VARISTOR	
VA19	NAF0008-171X	VARISTOR	
VA20	NAF0008-171X	VARISTOR	
VA21	NAF0008-171X	VARISTOR	
VA22	NAF0008-171X	VARISTOR	

Symbol No.	Part No.	Part Name	Description
SP1	SSV1568-105	FELT SPACER	
Q1	HAT1020R-X	TRANSISTOR	
Q2	DTC124EUA-X	TRANSISTOR	ROHM
Q3	HAT1020R-X	TRANSISTOR	
Q4	DTC124EUA-X	TRANSISTOR	ROHM
Q5	HAT1020R-X	TRANSISTOR	
Q6	DTC124EUA-X	TRANSISTOR	ROHM
D1	SB140L-6395	DIODE	SANYO
D2	HZM9C-X	ZENER DIODE	HITACHI
D3	HZM36NB-W	ZENER DIODE	HITACHI
D4	HZM36NB-W	ZENER DIODE	HITACHI
D5	HZM9C-X	ZENER DIODE	HITACHI
D6	HZM9C-X	ZENER DIODE	HITACHI
D7	HZM9C-X	ZENER DIODE	HITACHI
D8	HZM36NB-W	ZENER DIODE	HITACHI
R1	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R2	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R3	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R4	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R5	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R6	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R7	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R8	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R10	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R11	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R12	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R13	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R14	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R15	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
C1	QEU1EM-478	E.CAPACITOR	4700 25V
C2	NCF31EZ-104X	CER.CAPACITOR	0.1 25V
C3	NCF31EZ-104X	CER.CAPACITOR	0.1 25V
TH1	NAD0023-003X	THERMISTOR	00k
TH2	NAD0023-004X	THERMISTOR	000k
TH3	NAD0023-005X	THERMISTOR	0M
CN8	QGA1201C2-09X	CONNECTOR	9PIN
CN9	QGA1201C2-12X	CONNECTOR	12PIN
CN15	QGA1201C2-13X	CONNECTOR	13PIN
CN16	QGA1201C2-07X	CONNECTOR	7PIN
CN18	QGA1201C2-11X	CONNECTOR	11PIN
CN19	QGA3901C1-02	CONNECTOR	2PIN
CN20	QGA1501C1-04	CONNECTOR	4PIN
CN21	QGA3901C1-04	CONNECTOR	4PIN
CN22	QGA2001C1-02	CONNECTOR	2PIN
CN29	QGA1201C2-10X	CONNECTOR	10PIN
CN40	QGA1201C2-02X	CONNECTOR	2PIN
CN101	QGA1201C2-06X	CONNECTOR	6PIN
CN111	QGA2501C1-02	CONNECTOR	2PIN
TP4	NNZ0009-001X	TEST POINT	
TP5	NNZ0009-001X	TEST POINT	
BK1	QMH0015-008	BRAKER	
JK1	QNZ0097-001	JACK	DV TERMINAL
K1	NQR0351-001X	FERRITE BEADS	
K2	NQR0351-001X	FERRITE BEADS	
K3	NQR0351-001X	FERRITE BEADS	
TB1	PGZ02228	EARTH LUG	
TB2	PGZ02228	EARTH LUG	
TB3	PGZ02228	EARTH LUG	

6.15 OPE BOARD ASSEMBLY PARTS LIST 2 2

CK270100B3

2 2

Symbol No.	Part No.	Part Name	Description
D1	HZM12NB2-X	ZENER DIODE	HITACHI
D2	HZM12NB2-X	ZENER DIODE	HITACHI
D3	HZM12NB2-X	ZENER DIODE	HITACHI
D4	HZM12NB2-X	ZENER DIODE	HITACHI
R1	NRSA63D-102X	M.G.RESISTOR	1k 1/16W
R2	NRSA63D-122X	M.G.RESISTOR	1.2k 1/16W
R3	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
R4	NRSA63D-332X	M.G.RESISTOR	3.3k 1/16W
S1	NSW0010-001X	SWITCH	REW
S2	NSW0010-001X	SWITCH	STOP
S3	NSW0010-001X	SWITCH	FF
S4	NSW0010-001X	SWITCH	PLAY
S5	NSW0010-001X	SWITCH	STILL
S6	NSW0010-001X	SWITCH	BLANK
S7	NSW0035-001X	TACT SWITCH	EJECT
S8	NSW0175-001X	PUSH SWITCH	COVER
CN34	QGF1012F1-06X	CONNECTOR	6PIN

6.18 SWF BOARD ASSEMBLY PARTS LIST 2 5

CK270200B3

2 5

Symbol No.	Part No.	Part Name	Description
D1	HZM12NB2-X	ZENER DIODE	HITACHI
D2	HZM12NB2-X	ZENER DIODE	HITACHI
D3	HZM12NB2-X	ZENER DIODE	HITACHI
D4	HZM12NB2-X	ZENER DIODE	HITACHI
D5	HZM12NB2-X	ZENER DIODE	HITACHI
D6	HZM12NB2-X	ZENER DIODE	HITACHI
D7	HZM12NB2-X	ZENER DIODE	HITACHI
R1	NRSA63D-101X	M.G.RESISTOR	100 1/16W
R2	NRSA63D-562X	M.G.RESISTOR	5.6k 1/16W
R3	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R4	NRSA63D-183X	M.G.RESISTOR	18k 1/16W
VR1	QVQ0290-A14	VAL.RESISTOR	A10k, L AUD LEV
C1	NCB31CK-473X	CER.CAPACITOR	0.047 16V
C2	NCB31CK-473X	CER.CAPACITOR	0.047 16V
S1	QSW0052-004	TOGGLE SWITCH	AUTO WHITE
S2	QSW0189-001Z	PUSH SWITCH	VTR TRIG
S3	QSW0052-005	TOGGLE SWITCH	ZEBRA
CN10	QGA1501F1-05	CONNECTOR	5PIN
CN33	QGF1004F1-10	CONNECTOR	10PIN

6.16 XLR BOARD ASSEMBLY PARTS LIST 2 3

CK270200B1

2 3

Symbol No.	Part No.	Part Name	Description
C1	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C2	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C3	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C4	NDC31HJ-221X	CER.CAPACITOR	220p 50V
L1	NQL124J-101X	COIL	100uH
L2	NQL124J-101X	COIL	100uH
CN30	QGA1501C1-03	CONNECTOR	3PIN
JK7	QNZ0013-001	CONNECTOR	FRONT AUDIO IN
K1	NQR0351-001X	FERRITE BEADS	
K2	NQR0351-001X	FERRITE BEADS	

6.19 SWM BOARD ASSEMBLY PARTS LIST 2 6

CK270200B4

2 6

Symbol No.	Part No.	Part Name	Description
D1	HZM12NB2-X	ZENER DIODE	HITACHI
D2	HZM12NB2-X	ZENER DIODE	HITACHI
D3	HZM12NB2-X	ZENER DIODE	HITACHI
D4	HZM12NB2-X	ZENER DIODE	HITACHI
D5	HZM12NB2-X	ZENER DIODE	HITACHI
D6	HZM12NB2-X	ZENER DIODE	HITACHI
D7	HZM12NB2-X	ZENER DIODE	HITACHI
R1	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
R2	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
R3	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
R4	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
R5	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
R6	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
R7	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
S1	QSW0049-001	TOGGLE SWITCH	WHITE BALANCE
S2	QSW0049-001	TOGGLE SWITCH	OUTPUT
S3	QSW0049-001	TOGGLE SWITCH	GAIN
S4	QSW0052-002	TOGGLE SWITCH	MODE
CN28	QGF1004F1-08	CONNECTOR	8PIN

6.17 XLR BOARD ASSEMBLY PARTS LIST 2 4

CK270200B2

2 4

Symbol No.	Part No.	Part Name	Description
C1	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C2	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C3	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C4	NDC31HJ-221X	CER.CAPACITOR	220p 50V
L1	NQL124J-101X	COIL	100uH
L2	NQL124J-101X	COIL	100uH
CN31	QGA1501C1-03	CONNECTOR	3PIN
JK8	QNZ0013-001	CONNECTOR	REAR AUDIO IN
K1	NQR0351-001X	FERRITE BEADS	
K2	NQR0351-001X	FERRITE BEADS	

6.20 SWB BOARD ASSEMBLY PARTS LIST 27

CK270200B5

27

Symbol No.	Part No.	Part Name	Description
D1	HZM36NB-W	ZENER DIODE	HITACHI
D2	HZM12NB2-X	ZENER DIODE	HITACHI
R1	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
S1	QSW0048-001	TOGGLE SWITCH	POWER
S2	QSW0189-001Z	PUSH SWITCH	VTR TRIG
CN41	QGA1501F1-03	CONNECTOR	3PIN

6.22 EAR BOARD ASSEMBLY PARTS LIST 29

CK270200B7

29

Symbol No.	Part No.	Part Name	Description
C1	NDC31HJ-181X	CER.CAPACITOR	180p 50V
C2	NDC31HJ-181X	CER.CAPACITOR	180p 50V
C3	NDC31HJ-181X	CER.CAPACITOR	180p 50V
C4	NDC31HJ-181X	CER.CAPACITOR	180p 50V
L1	NQL024J-4R7X	COIL	4.7uH
L2	NQL024J-4R7X	COIL	4.7uH
CN38	QGA1501C1-05	CONNECTOR	5PIN
JK2	QNS0095-001	3.5 JACK	PHONES

6.21 AVO BOARD ASSEMBLY PARTS LIST 28

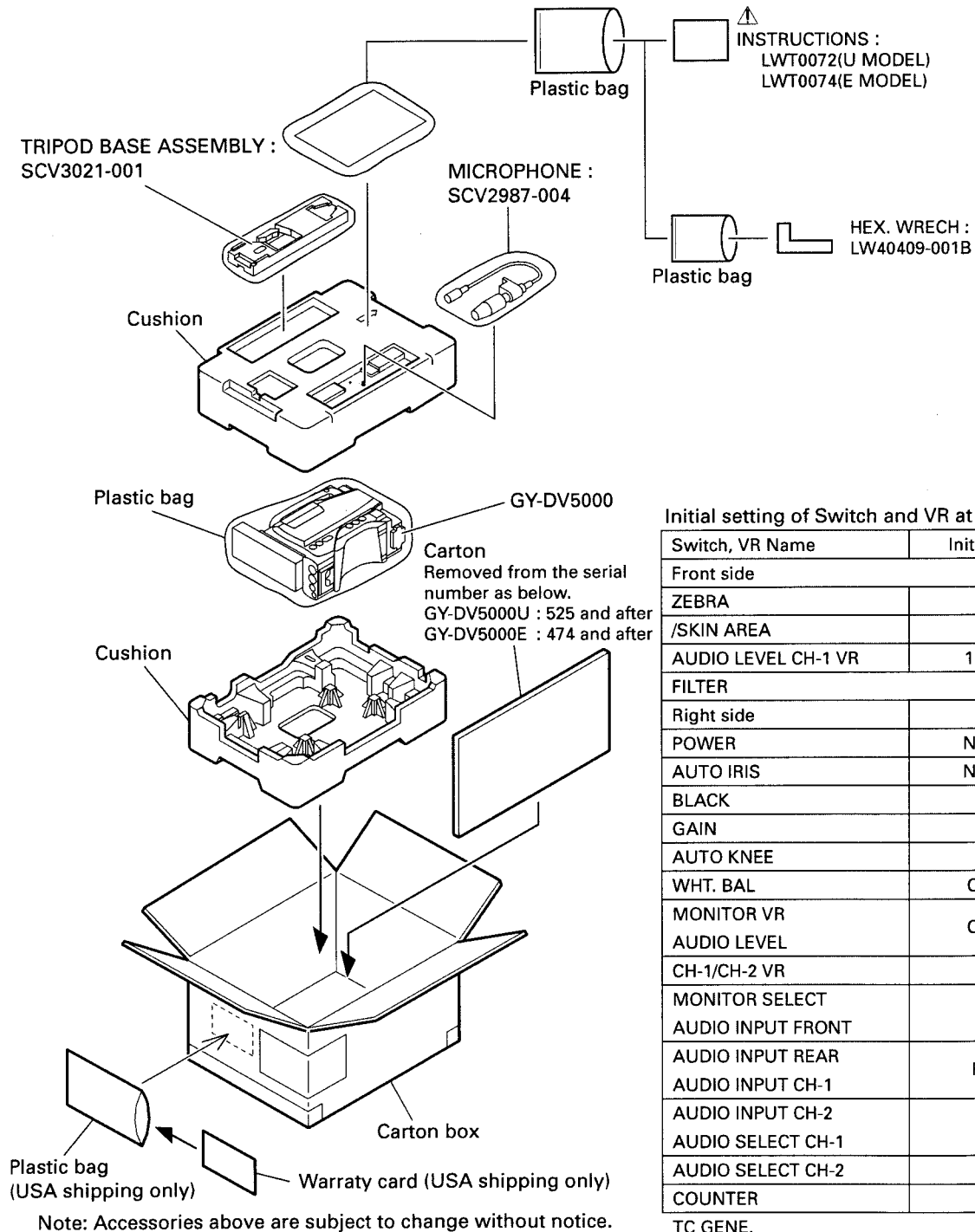
CK270200B6

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Symbol No.	Part No.	Part Name	Description
D1	HZM12NB2-X	ZENER DIODE	HITACHI
D2	HZM12NB2-X	ZENER DIODE	HITACHI
D3	HZM12NB2-X	ZENER DIODE	HITACHI
D4	HZM12NB2-X	ZENER DIODE	HITACHI
D5	HZM12NB2-X	ZENER DIODE	HITACHI
D6	HZM12NB2-X	ZENER DIODE	HITACHI
D7	HZM12NB2-X	ZENER DIODE	HITACHI
D8	HZM12NB2-X	ZENER DIODE	HITACHI
D9	HZM12NB2-X	ZENER DIODE	HITACHI
D10	HZM12NB2-X	ZENER DIODE	HITACHI
R1	NRSA63D-750X	M.G.RESISTOR	75 1/16W
R2	NRSA63D-560X	M.G.RESISTOR	56 1/16W
R3	NRSA63D-750X	M.G.RESISTOR	75 1/16W
C1	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C2	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C3	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C4	NDC31HJ-221X	CER.CAPACITOR	220p 50V
L1	NQL124J-101X	COIL	100uH
L2	NQL124J-101X	COIL	100uH
CN6	QGF1003C1-10	CONNECTOR	10PIN
JK5	QNN0251-001	JACK	LINE OUT
JK6	QNZ0630-001	S/BNC CONNECTOR	MON.I&YC OUT
K1	NQR0351-001X	FERRITE BEADS	
K2	NQR0351-001X	FERRITE BEADS	

SECTION 7 PACKING

7.1 PACKING ASSEMBLY



Initial setting of Switch and VR at shipment

Switch, VR Name	Initial setting
Front side	
ZEBRA	ON
/SKIN AREA	10
AUDIO LEVEL CH-1 VR	1 : 3200K
FILTER	
Right side	OFF
POWER	NORMAL
AUTO IRIS	NORMAL
BLACK	L
GAIN	ON
AUTO KNEE	B
WHT. BAL	CENTER
MONITOR VR	CENTER
AUDIO LEVEL	
CH-1/CH-2 VR	MIX
MONITOR SELECT	LINE
AUDIO INPUT FRONT	
AUDIO INPUT REAR	FRONT
AUDIO INPUT CH-1	
AUDIO INPUT CH-2	AUTO
AUDIO SELECT CH-1	
AUDIO SELECT CH-2	TC
COUNTER	REC

TC GENE.

SECTION 8 TECHNICAL INFORMATION

8.1 COMPARISON WITH PREVIOUS MODELS

PART	ITEMS	GY-DV5000	GY-DV500	GY-DV300
CAMERA	HORIZONTAL RESOLUTION	>700TVL	550TVL	700TVL
	VERTICAL RESOLUTION	450(V.MAX) 380(NORMAL)	←	←
	SYNCHRONIZE SYSTEM	Not available	HV	Not available
	S/N	(53dB)	53dB	(53dB)
	IMAGE DEVICE	1/2"IT 3CCD	←	1/3"IT CCD
	OPTICAL SYSTEM	F1.4 RGB PRISM	←	F1.6 RGB PRISM
	LENS MOUNT	1/2"BAYONET	←	FIXED
	SENSITIVITY	F13,2000lx	F11,2000lx	←
	MINIMUM ILLUMINATION	0.2lx(F1.4 LOLUX)	0.75lx(F1.4 LOLUX)	2.65lx(F1.6 LOLUX)
	REGISTRATION	0.05%	←	(0.05%)
	OPTICAL FILTERS	4 posotions	3 positions	2 positions
	CAMERA OUT	None	BNC	None
	GENLOCK IN	None	BNC(SYNC IN)	None
	CAMERA LOCAL REMOTE	None(*1)	None	None(*1)
	LENS CONNECTOR	12PIN	←	None
VTR	TAPE FORMAT	DV/miniDV	miniDV	miniDV
	TAPE SPEED	18.8mm/s(SP)	18.8mm/s(SP)	18.8mm/s(SP) 12.555mm/s(LP)
	RECORDING COMPRESSION FORMAT	DV	DV	DV
	RECORDING TIME	270min(ME270) 60min(ME60)	60min(ME60)	60min(ME60 SP) 90min(ME60 LP)
	FF/REW TIME	150sec(ME270) 60sec(ME60)	210sec	210sec
	AUDIO TRACK	2ch (PCM,16bit,48kHz)	←	←
		2ch (PCM,12bit,32kHz) but audio truck will prepare 4ch.	←	←
	MONITOR OUT(PB/EE)	BNC	BNC	RCA
	Y/C OUT (VTR)	MINI DIN 4PIN	←	←
	AUDIO IN	XLR-3	XLR-3	XLR-3
	MIC IN(WITH PHANTOM DC)	XLR-3	XLR-3	XLR-3
	AUDIO OUT	RCAX2	RCAX2	RCAX2
	HEADPHONE OUT	STEREO MINI	MONO MINI	STEREO MNI
	DV I/O(IEEE1394)	4PIN	4PIN	4PIN
	VTR REMOTE	None	MINI DIN 6PIN	None
	TC IN	None	None	None
	TC OUT	None	None	None
	TIME CODE	SMPTE (NTSC:DF/NDF)	←	←

*1 Control will be available use with KA-DV5000(KA-DV300) via PC.

GY-DV300

OVERALL	WEIGHT(OPERATION)	5.5kg	5.0kg	1.4kg
	DIMENSIONS(WxHxD)	120.5x249x363.5	120x245x300	130x159x357
	POWER REQUIREMENT	DC11 — 17V	DC11—17V	DC7.2V
	POWER CONSUMPTION	17W	18W	14.4w
	OPERATING TEMPERATURE	0 to 40°C	←	←
	OPERATING HUMIDITY	30 — 80%	←	←
	DC IN	XLR-4	←	Same as consumer model
	BATTERY BRACKET	IDX NP-1 TYPE	IDX NP-1 TYPE	Same as consumer model
	DC OUT	HIROSE-4P	HIROSE-4P	None
	LIGHT TERMINAL	None	None	None
	MULTI-PIN INTERFACE	Unique for KA-DV5000	None	Unique for KA-DV300
	VF OUT(WITH TALLY/BATT.IND)	6PIN	6PIN	None
	CASSETTE DOOR	○	○	○
	Casette window	○	None	None
	MIC	Provided	←	←
	TRIPOD BASE	Provided (Sony compatibility)	JVC origin	None
	STORAGE TEMPARATURE	-20 to 60°C	←	←